

# PACH Series Packaged Air Conditioners

(Range 5 TR to 27 TR)

Refrigerant - R22



Bulletin # 014/2010  
Supersedes Bulletin # 014/2006



# SKM Packaged Air Conditioners

## PACH Series - R22

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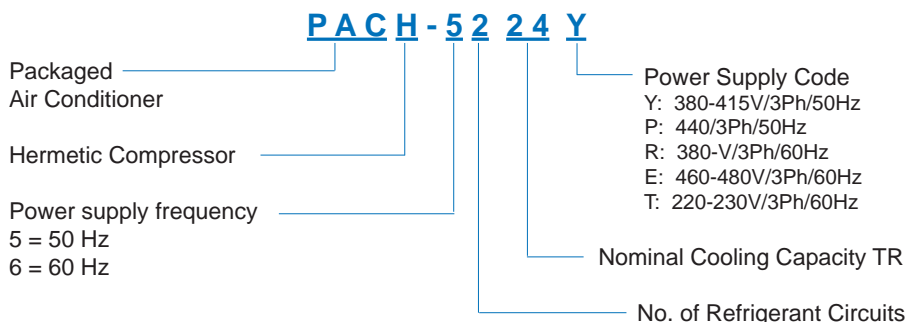
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### Legend

The following legends are used throughout this manual:

AFR	Air Flow Rate	MBH	BTUH x 1000
BPF	By-pass Factor	PH	Phase
C.Cap	Cooling Capacity	Pa	Pascal
CFM	Cubic feet per minute	PD	Pressure Drop
EER	Energy Efficiency Ratio	PI	Compressor Power Input in KW
Hz	Hertz	RPM	Rotations per Minute
in.wg	inches of water gauge	RPS	Rated Power Supply
KW	Kilowatt	TR	Tons of refrigeration = 12 MBH
Kg	Kilogram	V	Volts
lbs	Pounds weight (British units)		
L/S	Liters per second		

### Nomenclature



### Introduction

New SKM **PACH** Series Packaged Air Conditioners are designed and manufactured to meet the requirements of the Gulf's severe climatic conditions and are built specifically for outdoor installations, either on ground or roof level.

The **PACH** Series Packaged Air Conditioners are ideal for warehouses, large halls, schools, mosques, or wherever the requirement is for a heavy duty unit with a hermetic compressor.

Available in 14 different sizes from 5.0 to 24.0 nominal TR (18 to 85 kW) in 50Hz and from 5.5 to 27.0 nominal TR (20 to 94 kW) in 60Hz, PACH units are designed to operate in a wide ambient temperature range from 50°F (10.0°C) to 125°F (52.0°C) and even lower if an optional head pressure control system is attached.

**PACH** units are designed and rated in accordance with ARI-340-360 and 210/240 standards.

**PACH** Series Packaged Air Conditioners are completely assembled, internally wired, charged with refrigerant at factory, tested before despatch and ready for installation. All that is required on site is connecting ducting and power supply. This greatly reduces installation work and costs. They are designed for ducted systems which will enable them to be installed on roof tops or on the ground.

**PACH** Series Packaged Air Conditioners are yet another quality product from SKM, which are



*Built in the Gulf... for the world.*

# SKM Packaged Air Conditioners PACH Series - R22

## General Features

The PACH Series Packaged Air Conditioners is yet another new unique series from SKM incorporating a high efficiency cooling coil, heavy duty evaporator blower and motor resulting in an extremely rugged, long-life, energy efficient, self-contained unit that will provide cooling at higher efficiency over a long and extended life. Compared to the traditional units available in the market, the PACH series Packaged Units are very low on energy consumption.

The flexibility of the PACH series is ideal for consideration on special applications including:

- 100% fresh air units or units with high incidence of outdoor fresh air.
- Units with unusual filtration requirements incorporating carbon, bag and/or other filters.
- Units with special motor requirements including explosion proof or with anti-condensate heaters.
- Units with economiser options or with air-to-air heat exchangers between fresh air and exhausted air, factory built-in.
- Special units for ducted condenser air using centrifugal type condenser air fans.
- Units constructed of aluminium or stainless steel.
- For those special off-shore or refinery or sewage treatment applications requiring specially coated heat transfer coils.

All of these flexibilities cannot be cataloged nor all the possible options listed. They are available and SKM has had over 20 years of experience in designing and building such units to meet the most stringent requirements of most applications. For your special requirements please consult SKM factory.

## Component Features

The common standard features of all PACH series Packaged Units include the following.

### Compressor

Compressors used in the PACH series Packaged Units are hermetically sealed reciprocating type.

Compressors conform to internationally recognized standards like NF, VDE, CSA & UL.

All compressors are refrigerant gas cooled and provided with built-in protection comprising an internal overload device and internal pressure relief valve for long life quiet operation.

The compressors, incorporating a built-in muffler, are mounted on springs within a heavy gauge steel housing to give a low noise level. In addition, the compressors are provided with vibration isolators to further minimize noise and vibration.

The compressors are selected for their extremely high energy efficiency and heavy duty industrial/commercial usage with economy of operation.



### Condenser

Condenser coils are manufactured from seamless copper tubes mechanically bonded to aluminium fins to ensure optimum heat transfer. All coils are tested against leakage by air pressure of 450 psig (3100 KPa) under water. All standard coils are 3 or 4 rows/12 FPI, 3/8" (9.5 mm) O.D. tubes. An integral subcooling circuit is provided to increase the cooling capacity, without additional operating costs.

For different application requirements, other optional condenser fin materials are available as listed under options.



All models of the PACH series Packaged Units are restricted to a 12FPI or 144 fins per foot (2.1 mm fin spacing) condenser coil. Gulf dust storms and the general level of available maintenance in Gulf countries ensures this condenser coil design shall provide long life and maintenance-free service with the least possibility of blockage on the condenser.

Ample condenser surface and sensible air flow across the condenser ensures a low temperature differential between condensing temperature and the high Gulf ambients making the PACH series Packaged Units perform efficiently and durably.

The fin thickness of a standard SKM PACH series package unit is at least 20% more than the competition.

The condenser coil, thus, is better able to withstand the Gulf environment

### Condenser Fans

The condenser fans are propeller type, aluminium alloy blades, directly driven by electric motors.

Motors are Totally Enclosed Air Over (TEAO) six pole with class 'F' insulation and minimum IP55 protection.

The TEAO and class 'F' insulation features ensure long life and are unique to SKM. The motors are factory wired using wires specially selected for high ambients operation, to unit control panel where the motor contactors are located to control the operation of these motors.

The condenser fans are individually statically and dynamically balanced at the factory. Complete fan assembly is provided with suitable acrylic coated fan guard.





# SKM Packaged Air Conditioners

## PACH Series - R22

### Evaporator

Evaporator coils are manufactured from 3/8" (9.5 mm) OD seamless copper tubes mechanically bonded to aluminium fins to ensure optimum heat transfer. All evaporator coils are tested against leakage by air pressure of 250 psig (1720 kPa) under water.

The DX evaporator coils are complete with headers of seamless copper tubing. Supply headers incorporate a correctly sized distributor.

For different application requirements, other evaporator coil material and/or treatment are available on request. Evaporator coils are rated in accordance with ARI/410/91.

The PACH series dual circuit evaporator coils come complete with the correct configuration and split with individual thermostatic expansion valves and multi-circuited distributors providing capacity modulation to match the compressors.

The cross wave fin and staggered tube design uses the evaporator surface effectively by creating uniform air turbulence and optimum heat transfer over the entire finned surface.

Requirements for higher face velocities can be handed by use of moisture eliminators, thus preventing carry over.

### Evaporator Fan & Drive

Standard evaporator fan is forward curved centrifugal DIDW, statically and dynamically balanced complete with shaft, self-aligning, lubricated for life ball bearings.

PACH series models 5215 & 6216 onwards have dual fans mounted on a single heavy duty shaft. The fan(s) are driven by a single electric motor, Class F insulated, IP55 protected & are totally enclosed 4 pole motor rated for continuous operation at design conditions.

The motor is fitted with an adjustable vee-belt drive, as standard. Shaft ends insert into oversized, tapered lock self-aligning, long-life bearings. Motor is factory wired to the control panel where the motor contactors are located.

### Refrigerant Circuit

PACH series Packaged Units come complete, as standard, with correctly sized and piped refrigerant lines including filter drier, thermostatic expansion valve, shut-off valve and a full operating charge of R-22 in each circuit.

Piping is fabricated from ACR grade copper piping. Suction line is insulated with 1/2" (12mm) thickness closed cell pipe insulation.

### Casing/Structure

The unit casing used in PACH Packaged units is made of zinc coated galvanized steel sheets conforming to JIS-G 3302 and ASTM A525 which is phosphatized before application of an electrostatic powder coat of approximately 60 microns and then oven-baked for a tough and lasting weather resistant finish. This finish and coating can pass a 1000 hour in 5 % salt spray testing at 95°F (35°C) and 95% relative humidity as per ASTM B117 - 95.

The entire casing panels are designed to be leak proof against rain and ensure rain water cannot enter the H-series packaged air conditioner interior. The evaporator section is sealed with vinyl gaskets.

The standard evaporator section is insulated from all sides with black-neoprene faced heavy density 1" thick fiber glass insulation. The insulation-cum-sound liner meets the fire requirements of NFPA90A & 90B and is secured with mechanical fasteners in addition to water resistant adhesive.

For applications requiring an inner skin in the evaporator section, option DSE provides an 0.8 mm galvanized inner skin. Suitable isolation to ensure no cold-bridges and no condensation on the exterior of the units is provided.

The condensate drain pan is heavily insulated to ensure condensation does not occur. Stainless steel condensate drain pans are available on request.

### Electrical Control Panel

The unit mounted control panel is an IP 54 enclosure and incorporates all starting, operating and safety controls. This IP 54 control panel, with a dead front panel cover, screwed onto the enclosure prevents unauthorized personnel from tampering with controls. Safety and operating controls are arranged for easy accessibility. All wiring is sized as per NEC regulations; Articles 430 & 440. Wiring is fully ferruled enabling ease of proper identification. Panel can be made to IP-55 protection, as an option, if required.



LEGEND :		
C Contactor	CR Control Relay	OL Overload Relay
CF Control Fuse	CS Control Switch	PT Power Terminal Block
	CT Control Terminal Block	TDR Time Delay Relay
	F Power Circuit Fuse	TFR Transformer

The standard IP54 control panel in the PACH series incorporates the following :

- Individual compressor, condenser fan motor and evaporator fan motor contactors.
- Condenser fan motor and evaporator fan motor overload relays.
- 24 volts transformer for user supplied and installed room thermostat
- Anti-recycling time delay relay
- Control circuit disconnect switch
- Power & control circuit terminal block

# SKM Packaged Air Conditioners

## PACH Series - R22

### Optional Features

**PACH** series stands for flexibility. These heavy duty packaged air conditioners are available with a multitude of optional features which makes design and selection extremely easy and capable of matching the most stringent of requirements.

### Factory Installed

#### Microprocessor Based Control (MCP)

The controller consists of modules with on board display and user interface terminals. The modules are available in both panel and DIN rail versions. The controller has compact dimensions and manage package unit with up to 4 steps and 2 circuits. The controller has the following features.

- Built in anti recycle timer to prevent compressor short cycling.
- Auto, lead/lag of the compressor.
- Common alarm available through the dry contact.
- Remote start/stop of the unit.
- Cooling and heating function are available.
- BMS connectivity with external converter (Protocol: MODBUS)

Following parameters can display on the controller LCD:

- Return or space air temperature.
- High pressure, low pressure and air flow alarm.
- Capacity steps.
- Icon of different modes.



The user interface has two options; it could be Remote Terminal and Room Terminal.

#### Remote terminal:

It is sophisticated graphic LCD for the panel mounting, installation on the unit, or remote wall mounting, for the complete control of the unit. This terminal has an excellent feature for servicing and setting up the unit. It can interface easily through RS485 terminal and require external temperature sensor to control the unit.



#### Room terminal:

It has LCD with icons for remote wall-mounting in the room as a simple user interface, with built in temperature plus humidity sensor and the band management, for use in residential or smaller commercial services applications. Due to the built in temperature sensor, external sensors are not required.



**Note:** For customize control system, please consult SKM

#### Electric Heating (HC@)

The heater batteries shown below are the standard available for this option:

Electric heater batteries are available with finned type elements. Heating elements are constructed from high quality 80/20 nickel chrome resistance wire centered in metal tubes by compressed magnesium oxide. Helical fins tightly wound round tubular heating element.

Standard components included when ordered are:

- 3 pole magnetic contactor per stage
- 1 primary over current protection provided by Auto reset high limit safety cut-out
- 1 secondary over current protection provided by Manual reset high limit safety cut-out for positive break
- Control fuse
- Control switch
- Power fuses per NEC if total load exceeds 48 amps
- Factory installed air flow switch

# SKM Packaged Air Conditioners

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Following are the Standard Electrical Heating Option KW rating, options other than those specified below can be supplied on request. Consult SKM for full details.

PACH		Heater kW	Stages
5105	6106	7.5	1
5106	6107		
5107	6108	9	
5108	6109		
5109	6110	12	
5210	6211		
5111	6112	18	2
5211	6212		
5112	6113		
5213	6214		
5215	6216		
5219	6221	24	
5222	6224		
5224	6227		

Table 1

### Alternative Condenser Material

Made of copper tubes and alternative fin material and/or protective coating.

- For Copper Fins specify **(FC)**
- For Copper Fins electrotinned specify **(FCT)**
- For precoated aluminum fins specify **(FAP)**

### Alternative Evaporator Material

Made of copper tubes and alternative fin material and/or protective coats.

- For Copper Fins specify **(FC)**
- For Copper Fins electrotinned, specify **(FCT)**
- For Precoated Aluminum fins, specify **(FAP)**

### Condenser Coil Guard **(CGP)**

Wire mesh guard, in painted finish for condenser coils. Recommended on ground level installations where coil needs to be protected against vandalism.

### Double Skin Evaporator **(DSE)**

Inner skin of 0.8mm galvanized sheet in the evaporator section provided with no cold bridges. Recommended for 100% fresh air applications.

### Filter Section **(FFS/VFS/BFS)**

Can be provided for flat filters or vee filters configuration for relatively higher or lower, respectively, face velocities on the filters. Bag filter section can be provided, additionally, if required.

Flat filter sections can accommodate 1" or 2" thick cleanable media aluminium or synthetic filters for particle/dust removal.

The Bag Filter section can house 22", 30" or 36" deep bag filters to meet specific requirements of efficiencies or contaminants in the air stream. Specify on enquiry / order write up.

### High Ambient Operation Kit **(HAO)**

For operation, at reduced load, at ambient temperature between 125°F (52°C) and 131°F (55°C) maximum.

### Hot Gas Bypass System **(GBP)**

With solenoid to enable operation of a large sized unit at very low loads, during low ambients due to application requirements.

### IP-55 Control Panel **(ICP)**

IP55 enclosure for extra protection against the elements.

### Isolated Condenser Fan Motor **(CMS)**

For elimination of extraneous noise and vibrations from condenser fan motor, the motors are individually isolated from the frame.

### Low Ambient Operation Kit **(LAO)**

For operation down to lower than normal Gulf ambients. It is also required for special applications.

### Pressure Gauges **(SDG)**

Suction, discharge and oil pressure indication of each refrigerant circuit. Gauges mounted **outside** the Control Panel.

### Pump Down Facility **(PD)**

For providing means to pump down circuit refrigerant gas into condenser.

### Run Hour Meter(s) **(RHM)**

To monitor operating hours of each compressor.

### Stainless Steel Drain Pan **(SSP)**

Heavy gauge 316 stainless steel drain pan under the entire cooling coil and moisture eliminator. Insulation under drain pan as per SKM standard.

### Voltage Monitoring Module **(VMM)**

To prevent Packaged Air Conditioner operation in the event of Phase burn-out, Phase reversal, and Under / Over voltage on the incoming line voltage.

### Voltage Monitoring Module **(DVM)**

To meet DEWA Regulations.

### Lead Lag Switch **(LLS)**

For double circuit units.

### Electronic Expansion Valves **(EEV)**

### Manual Reset Type High Pressure Switch **(MHP)**

# SKM Packaged Air Conditioners

## PACH Series - R22

### External Overload Protection (EOP)

For those electrical specification requires additional overload protection for the compressors.

### Extra Shut Off Valve (XFV)

### Two inch insulation (2SG) For evaporator section

### Anti Spark Fan Belt (SPF)

### Sand Trap Louvre (ASL)

### Condenser & Evaporator Fans with polyglycoat coating (PGF)

### Marine Paint (MP)

To provide increased corrosion resistance coastal environments and offshore locations.

### Aries Coating for Aluminum Fins (FAA) & Copper Fins (FCA)

For both evaporator and condenser coils.

### Galvanized Frame And Base (GFB)

Steel frame and base which are hot dip galvanized after manufacture. This is recommended for highly corrosive environments.

### Mixing Box With / Without Sand Trap Louvre and Bird Screen On Fresh Air Side. (BMX)

## Options for Field Installations

### Anti-vibration mounts (CAVM)

Recommended for roof mounted units or other locations in the vicinity of occupied spaces, where noise may be objectionable.

### Cooling Only Thermostat (Not with Option MCP) (COTS)

Single stage or two stage wall mounted type are available from SKM. When option SCK ordered, customer **must** obtain thermostat to match total available steps and type desired.

### Cooling Heating Thermostat (Not with Option MCP) (CHTS)

Single stage or two stage cooling with single or two stage heating versions are available from SKM. Specify when ordering. Any other requirements to be procured by customer from any control vendor to suit.

### Hi-Lo and Oil Pressure Gauges (CSDG)

Without piping or isolating pet cocks.

Special custom built units incorporating specially required features like units for larger capacities, units with heat pipe, units with anti-condensation resistance heaters embedded in condenser motors, explosion proof units incorporating open driven compressors etc. can be manufactured on request.

For off-shore applications, special units with stainless steel panels and explosion proof units suitable for classified areas or zones (Class-I Div I, Div II / Zone-I, Zone II, etc.) can be manufactured as per customer requirement.

**Contact SKM for all such applications or requirements.**



# SKM Packaged Air Conditioners

## PACH Series - R22

### ENGINEERING SPECIFICATIONS - 50 HZ

Model			PACH	5105	5106	5107	5108	5109	5210	5111	
Cooling Capacity (1)			TR	5.0	5.3	6.2	7.4	9.1	9.7	10.8	
			kW	17.6	18.6	21.8	25.9	32.0	34.3	38.1	
Cooling Capacity (2)			TR	4.6	4.8	5.7	6.7	8.3	8.9	9.8	
			kW	16.1	17.0	19.9	23.5	29.0	31.4	34.4	
Compressor	Type		Fully Hermetic Reciprocating								
	Code		MH 6	MH 7	MH 8	MH 10	MH 12	MH 6	MH 14		
	Quantity		No.	1	1	1	1	1	2	1	
	Oil Charge per Compressor		US Gal	0.5	0.5	0.5	1.1	1.1	0.5	1.1	
Liter			1.9	1.9	1.9	4.2	4.2	1.9	4.2		
Condenser	Coil	Type		Air Cooled Copper Tubes Aluminum Fins							
		Face Area		sq. ft.	9.7	9.7	12.2	12.2	14.7	19.4	14.7
			sq. m.	0.9	0.9	1.1	1.1	1.4	1.8	1.4	
	Fan	Type		Propeller Direct Drive Aluminum Blade							
		Code / Quantity		628 / 1	628 / 1	723 / 1	729 / 1	823 / 1	628 / 2	823 / 1	
		Air Flow Rate		cfm	4530	4530	6720	7450	9140	9060	8790
				l/s	2138	2138	3171	3516	4313	4275	4148
	Motor	Type		Totally Enclosed, Air Over, Class F Insulation, 6 Pole, IP55							
		Size	kW	0.37	0.37	0.75	1.10	1.50	2 x 0.37	1.50	
		Power Input	kW	0.55	0.55	1.00	1.40	2.10	2 x 0.55	2.10	
Evaporator	Coil	Type		Direct Expansion, Cross Wave Fin, Staggered Tubes							
		Face Area		sq. ft.	4.7	4.7	5.5	6.6	7.7	8.6	9.6
				sq. m.	0.4	0.4	0.5	0.6	0.7	0.8	0.9
	Fan	Type		Centrifugal Double Inlet, Double Width Belt Drive							
		Code / Quantity		N10 / 1	N10 / 1	N10 / 1	N12 / 1	N15 / 1	N15 / 1	N15 / 1	
		Air Flow Rate		cfm	2200	2400	2750	3300	3830	4170	4800
				l/s	1038	1133	1298	1558	1808	1968	2266
	Motor	Type		Totally Enclosed, Class F Insulation, IP55							
		Size	kW	1.1	1.1	1.1	1.5	2.2	2.2	2.2	
		Power Input	kW	1.4	1.4	1.4	2.0	2.8	2.8	2.8	
Refrigerant Operating Charge (R22)			lbs	11.0	12.1	13.6	14.5	16.5	22.0	22.0	
			kg	5.0	5.5	6.2	6.6	7.5	10.0	10.0	
Number of Refrigerant Circuits			No.	1	1	1	1	1	2	1	
Approximate Machine Weight			lbs	702	704	812	925	1081	1218	1155	
			kg	318	319	368	420	490	552	524	

Model			PACH	5211	5112	5213	5215	5219	5222	5224
Cooling Capacity (1)			TR	10.6	11.7	12.3	14.6	19.3	22.3	24.2
			kW	37.4	41.0	43.4	51.2	67.7	78.3	85.1
Cooling Capacity (2)			TR	9.7	10.6	11.3	13.3	17.3	20.1	21.8
			kW	34.2	37.2	39.8	46.6	61.0	70.6	76.8
Compressor	Type		Fully Hermetic Reciprocating							
	Code		MH 7	MH 16	MH 8	MH 10	MH 12	MH 14	MH 16	
	Quantity		No.	2	1	2	2	2	2	
	Oil Charge per Compressor		US Gal	0.5	1.1	0.5	1.1	1.1	1.1	
			Liter	1.9	4.2	1.9	4.2	4.2	4.2	
Condenser	Coil	Type		Air Cooled Copper Tubes Aluminum Fins						
		Face Area		sq. ft.	19.4	17.2	24.4	24.4	29.4	29.4
				sq. m.	1.8	1.6	2.3	2.3	2.7	2.7
	Fan	Type		Propeller Direct Drive Aluminum Blade						
		Code / Quantity		628 / 2	823 / 1	723 / 2	729 / 2	823 / 2	823 / 2	
		Air Flow Rate		cfm	9060	9130	13440	14900	18280	17580
				l/s	4275	4308	6342	7031	8626	8296
	Motor	Type		Totally Enclosed, Air Over, Class F Insulation, 6 Pole, IP55						
		Size		kW	2 x 0.37	1.50	2 x 0.75	2 x 1.1	2 x 1.5	2 x 1.5
		Power Input		kW	2 x 0.55	2.10	2 x 1	2 x 1.4	2 x 2.1	2 x 2.1
Evaporator	Coil	Type		Direct Expansion, Cross Wave Fin, Staggered Tubes						
		Face Area		sq. ft.	9.6	10.0	10.9	13.6	15.0	18.0
				sq. m.	0.9	0.9	1.0	1.3	1.4	1.7
	Fan	Type		Centrifugal Double Inlet, Double Width Belt Drive						
		Code / Quantity		N15 / 1	N15 / 1	N15 / 1	N12 / 2	N12 / 2	N15 / 2	
		Air Flow Rate		cfm	4800	5000	5450	6000	7000	8000
				l/s	2266	2360	2572	2832	3304	3776
	Motor	Type		Totally Enclosed, Class F Insulation, IP55						
		Size		kW	2.2	2.2	3.0	3.0	3.0	3.0
		Power Input		kW	2.8	2.8	3.8	3.8	3.8	5.0
Refrigerant Operating Charge (R22)			lbs	24.2	25.3	27.3	29.0	33.0	44.0	
			kg	11.0	11.5	12.4	13.2	15.0	20.0	
Number of Refrigerant Circuits			No.	2	1	2	2	2	2	
Approximate Machine Weight			lbs	1232	1216	1394	1601	1813	1998	
			kg	559	551	632	726	822	906	

#### Notes :

(1). Capacity rating in accordance with ARI standard 210/240 - 94 & 340 / 360 - 93. (2). Capacity ratings based on evaporator entering air temperatures of 80/67 °F (26.7/19.4 °C) dry bulb/wet bulb and condenser entering air temperature of 115 °F (46 °C).



# SKM Packaged Air Conditioners

## PACH Series - R22

### ENGINEERING SPECIFICATIONS - 60 HZ

Model				PACH	6106	6107	6108	6109	6110	6211	6112		
Cooling Capacity (1)				TR	5.5	5.8	6.8	8.1	10.0	10.7	11.9		
				kW	19.5	20.6	24.1	28.5	35.2	37.8	41.8		
Cooling Capacity (2)				TR	5.1	5.4	6.3	7.4	9.1	9.9	10.9		
				kW	17.9	18.9	22.2	26.0	32.1	34.8	38.2		
Compressor	Type			Fully Hermetic Reciprocating									
	Code			MH 6	MH 7	MH 8	MH 10	MH 12	MH 6	MH 14			
	Quantity			No.	1	1	1	1	1	2	1		
	Oil Charge per Compressor			US Gal	0.5	0.5	0.5	1.1	1.1	0.5	1.1		
Liter				1.9	1.9	1.9	4.2	4.2	1.9	4.2			
Condenser	Coil	Type		Air Cooled Copper Tubes Aluminum Fins									
		Face Area		sq. ft.	9.7	9.7	12.2	12.2	14.7	19.4	14.7		
			sq. m.	0.9	0.9	1.1	1.1	1.4	1.8	1.4			
	Fan	Type			Propeller Direct Drive Aluminum Blade								
		Code / Quantity			628 / 1	628 / 1	723 / 1	729 / 1	823 / 1	628 / 2	823 / 1		
		Air Flow Rate			cfm	5500	5500	7970	8840	11120	11000	10700	
			I/s	2595	2595	3741	4172	5248	5191	5049			
	Motor	Type			Totally Enclosed, Air Over, Class F Insulation, 6 Pole, IP55								
		Size		kW	0.55	0.55	1.10	1.50	2.20	2 x 0.55	2.20		
		Power Input		kW	0.80	0.80	1.50	2.00	3.00	2 x 0.8	3.00		
Evaporator	Coil	Type		Direct Expansion, Cross Wave Fin, Staggered Tubes									
		Face Area		sq. ft.	4.7	4.7	5.5	6.6	7.7	8.6	9.6		
			sq. m.	0.4	0.4	0.5	0.6	0.7	0.8	0.9			
	Fan	Type			Centrifugal Double Inlet, Double Width Belt Drive								
		Code / Quantity			N10 / 1	N10 / 1	N10 / 1	N12 / 1	N15 / 1	N15 / 1	N15 / 1		
		Air Flow Rate			cfm	2200	2400	2750	3300	3830	4170	4800	
			I/s	1038	1133	1298	1558	1808	1968	2266			
	Motor	Type			Totally Enclosed, Class F Insulation, IP55								
		Size		kW	1.1	1.1	1.1	1.5	2.2	2.2	2.2		
		Power Input		kW	1.4	1.4	1.4	1.9	2.8	2.8	2.8		
Refrigerant Operating Charge (R22)				lbs	11.0	12.1	13.6	14.5	16.5	22.0	22.0		
				kg	5.0	5.5	6.2	6.6	7.5	10.0	10.0		
Number of Refrigerant Circuits				No.	1	1	1	1	1	2	1		
				lbs	702	704	812	925	1081	1218	1155		
Approximate Machine Weight				kg	318	319	368	420	490	552	524		
Model				PACH	6212	6113	6214	6216	6221	6224	6227		
Cooling Capacity (1)				TR	11.8	12.8	13.6	16.1	21.2	24.5	26.7		
				kW	41.4	45.1	48.0	56.5	74.7	86.1	94.0		
Cooling Capacity (2)				TR	10.8	11.7	12.6	14.7	19.3	22.3	24.3		
				kW	38.0	41.2	44.2	51.6	67.7	78.6	85.4		
Compressor	Type			Fully Hermetic Reciprocating									
	Code			MH 7	MH 16	MH 8	MH 10	MH 12	MH 14	MH 16			
	Quantity			No.	2	1	2	2	2	2			
	Oil Charge per Compressor			US Gal	0.5	1.1	0.5	1.1	1.1	1.1	1.1		
Liter				1.9	4.2	1.9	4.2	4.2	4.2	4.2			
Condenser	Coil	Type		Air Cooled Copper Tubes Aluminum Fins									
		Face Area		sq. ft.	19.4	17.2	24.4	24.4	29.4	34.4			
			sq. m.	1.8	1.6	2.3	2.3	2.7	2.7	3.2			
	Fan	Type			Propeller Direct Drive Aluminum Blade								
		Code / Quantity			628 / 2	823 / 1	723 / 2	729 / 2	823 / 2	823 / 2	823 / 2		
		Air Flow Rate			cfm	11000	11110	15940	17680	22240	21400	22220	
			I/s	5191	5243	7522	8343	10495	10099	10486			
	Motor	Type			Totally Enclosed, Air Over, Class F Insulation, 6 Pole, IP55								
		Size		kW	2 x 0.55	2.20	2 x 1.1	2 x 1.5	2 x 2.2	2 x 2.2	2 x 2.2		
		Power Input		kW	2 x 0.8	3.00	2 x 1.5	2 x 2	2 x 3	2 x 3	2 x 3		
Evaporator	Coil	Type		Direct Expansion, Cross Wave Fin, Staggered Tubes									
		Face Area		sq. ft.	9.6	10.0	10.9	13.6	15.0	18.0	18.0		
			sq. m.	0.9	0.9	1.0	1.3	1.4	1.7	1.7			
	Fan	Type			Centrifugal Double Inlet, Double Width Belt Drive								
		Code / Quantity			N15 / 1	N15 / 1	N15 / 1	N12 / 2	N12 / 2	N15 / 2	N15 / 2		
		Air Flow Rate			cfm	4800	5000	5450	6000	7000	8000	9000	
			I/s	2266	2360	2572	2832	3304	3776	4248			
	Motor	Type			Totally Enclosed, Class F Insulation, IP55								
		Size		kW	2.2	2.2	3.0	3.0	3.0	3.0	4.0		
		Power Input		kW	2.8	2.8	3.7	3.7	3.7	3.7	4.8		
Refrigerant Operating Charge (R22)				lbs	24.2	25.3	27.3	29.0	33.0	44.0	50.6		
				kg	11.0	11.5	12.4	13.2	15.0	20.0	23.0		
Number of Refrigerant Circuits				No.	2	1	2	2	2	2	2		
Approximate Machine Weight				lbs	1232	1216	1394	1601	1813	1998	2082		
				kq	559	551	632	726	822	906	944		

#### Notes :

(1). Capacity rating in accordance with ARI standard 210/240 - 94 & 340 / 360 - 93. (2). Capacity ratings based on evaporator entering air temperatures of 80/67 °F (26.7/19.4 °C) dry bulb/wet bulb and condenser entering air temperature of 115 °F (46 °C).



# SKM Packaged Air Conditioners

## PACH Series - R22

### Selection Procedure

**PACH** series packaged air-conditioners should be selected with care and using sound engineering judgement. Selections based on matching total capacity alone or air flow rate alone may not be correct. To meet requirements of a specific application, sample procedure for selection is given in examples below.

	Example 1: English Units	Example 2: SI Units
Application Requirements		
Required total cooling capacity.....	186.0 MBH .....	54.5 kW
Sensible cooling capacity .....	126.0 MBH .....	36.9 kW
Condenser entering air temp db .....	115°F .....	46°C
Evaporator entering air temp. db/wb .....	80/67°F .....	26.7/19.4°C
Evaporator air flow rate .....	6,400 cfm .....	3021 l/s
External static pressure .....	1.00 inwg.....	250 Pa
Electric power supply .....	380V/3PH/50Hz .....	380V/3PH/50Hz

Determine cooling capacity at design conditions.

### Selection Procedure :

Enter packaged unit capacity ratings (50Hz) at given condition and select unit size PACH - 5219 having total cooling capacity 204.1 MBH (59.8 kW), and sensible cooling 138.9 MBH (40.7 kW), PI = 22.8 kW. Total sensible cooling capacities & power input found by interpolation. For EDB other than 80°F (26.7°C), use following formula:

Actual sensible capacity = Rated sensible capacity + 0.0011 (1 - BPF)(EDB - 80) x cfm - IP Units  
 Actual sensible capacity = Rated sensible capacity + 0.00123 (1 - BPF)(EDB - 26.7) x l/s - SI Units

### Fan Speed & Motor Power

Refer to fan performance table on page 12 and adjust fan RPM = 1030, fan brake power 2.2 kw. Standard motor size for selected model is 3.0 kW.

**SKM Computer Selections are available for quick, detailed and accurate selections.**

# SKM Packaged Air Conditioners PACH Series - R22

## CAPACITY RATINGS - 50 HZ

Model PACH [EER]	AFR  cfm l/s [BPF]	Evaporator Entering WBT		Condenser Entering Air Temperature																							
				95°F (35°C)						105°F (40°C)						115°F (46°C)						125°F (52°C)					
				Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI				
		°F	°C	MBH	kW	MBH	kW	kW	MBH	kW	MBH	kW	kW	MBH	kW	MBH	kW	kW	MBH	kW	MBH	kW	kW				
5105 [9.1]	1600	62	16.7	51.6	15.1	41.8	12.3	4.9	49.5	14.5	40.9	12.0	5.2	47.4	13.9	40.0	11.7	5.6	45.1	13.2	39.0	11.4	6.0				
	755	67	19.4	56.6	16.6	35.3	10.3	5.1	54.3	15.9	34.5	10.1	5.5	52.0	15.2	33.6	9.8	5.9	49.5	14.5	32.6	9.6	6.3				
	0.26	72	22.2	61.3	18.0	28.5	8.4	5.3	58.9	17.3	27.7	8.1	5.7	56.4	16.5	26.8	7.9	6.1	53.7	15.7	26.0	7.6	6.6				
	2200	62	16.7	54.8	16.0	48.6	14.3	5.0	52.4	15.4	47.7	14.0	5.4	50.0	14.7	46.7	13.7	5.8	47.5	13.9	45.7	13.4	6.2				
	1038	67	19.4	60.1	17.6	40.4	11.8	5.2	57.6	16.9	39.5	11.6	5.6	55.0	16.1	38.6	11.3	6.1	52.3	15.3	37.6	11.0	6.5				
	0.31	72	22.2	65.1	19.1	31.9	9.3	5.4	62.5	18.3	31.0	9.1	5.8	59.7	17.5	30.1	8.8	6.3	56.8	16.7	29.2	8.6	6.8				
	2420	62	16.7	55.6	16.3	50.9	14.9	5.1	53.2	15.6	50.0	14.7	5.4	50.8	14.9	49.0	14.4	5.8	48.2	14.1	48.0	14.1	6.2				
	1142	67	19.4	61.0	17.9	42.1	12.3	5.3	58.5	17.1	41.2	12.1	5.7	55.8	16.4	40.3	11.8	6.1	53.0	15.5	39.3	11.5	6.6				
5106 [8.8]	0.32	72	22.2	66.2	19.4	33.0	9.7	5.4	63.4	18.6	32.1	9.4	5.9	60.6	17.8	31.2	9.2	6.3	57.6	16.9	30.3	8.9	6.8				
	1730	62	16.7	54.8	16.1	44.4	13.0	5.4	52.6	15.4	43.4	12.7	5.9	50.3	14.7	42.5	12.4	6.3	47.8	14.0	41.4	12.1	6.8				
	816	67	19.4	59.9	17.5	37.4	11.0	5.7	57.5	16.8	36.5	10.7	6.1	55.0	16.1	35.5	10.4	6.7	52.3	15.3	34.5	10.1	7.2				
	0.27	72	22.2	64.6	18.9	30.1	8.8	5.9	62.1	18.2	29.2	8.6	6.4	59.3	17.4	28.3	8.3	7.0	57.9	17.0	27.8	8.2	7.2				
	2400	62	16.7	58.0	17.0	51.7	15.2	5.6	55.6	16.3	50.8	14.9	6.0	53.0	15.5	49.7	14.6	6.5	50.3	14.7	48.7	14.3	7.0				
	1133	67	19.4	63.5	18.6	42.9	12.6	5.8	60.8	17.8	41.9	12.3	6.3	58.0	17.0	40.9	12.0	6.9	56.5	16.6	40.4	11.8	7.1				
	0.32	72	22.2	68.5	20.1	33.7	9.9	6.1	65.7	19.3	32.8	9.6	6.6	62.7	18.4	31.8	9.3	7.2	61.1	17.9	31.3	9.2	7.4				
	2640	62	16.7	58.8	17.2	54.2	15.9	5.6	56.3	16.5	53.2	15.6	6.1	53.7	15.7	52.2	15.3	6.6	50.9	14.9	50.9	14.9	7.1				
5107 [9.0]	1246	67	19.4	64.4	18.9	44.7	13.1	5.9	61.6	18.1	43.7	12.8	6.4	58.8	17.2	42.7	12.5	6.9	57.3	16.8	42.2	12.4	7.2				
	0.34	72	22.2	69.5	20.4	34.9	10.2	6.1	66.6	19.5	33.9	9.9	6.7	63.5	18.6	33.0	9.7	7.2	61.9	18.1	32.5	9.5	7.5				
	2000	62	16.7	64.1	18.8	51.7	15.2	5.9	61.5	18.0	50.6	14.8	6.4	58.9	17.3	49.5	14.5	7.0	56.1	16.4	48.4	14.2	7.5				
	944	67	19.4	70.1	20.5	43.6	12.8	6.2	67.3	19.7	42.6	12.5	6.7	64.5	18.9	41.5	12.2	7.3	61.4	18.0	40.4	11.8	7.9				
	0.26	72	22.2	75.7	22.2	35.2	10.3	6.4	72.8	21.3	34.2	10.0	7.0	69.7	20.4	33.1	9.7	7.6	66.4	19.5	32.0	9.4	8.2				
	2750	62	16.7	67.9	19.9	60.1	17.6	6.1	65.0	19.1	58.9	17.3	6.6	62.1	18.2	57.8	16.9	7.2	59.0	17.3	56.5	16.6	7.7				
	1298	67	19.4	74.3	21.8	49.9	14.6	6.4	71.3	20.9	48.8	14.3	6.9	68.1	20.0	47.6	14.0	7.5	64.7	19.0	46.4	13.6	8.1				
	0.31	72	22.2	80.4	23.6	39.3	11.5	6.6	77.1	22.6	38.3	11.2	7.2	73.7	21.6	37.2	10.9	7.8	70.0	20.5	36.0	10.6	8.4				
5108 [8.8]	3025	62	16.7	68.8	20.2	62.9	18.4	6.1	66.0	19.3	61.8	18.1	6.7	63.0	18.5	60.6	17.8	7.2	59.8	17.5	59.3	17.4	7.8				
	1427	67	19.4	75.4	22.1	52.0	15.2	6.4	72.3	21.2	50.9	14.9	7.0	69.0	20.2	49.7	14.6	7.6	65.6	19.2	48.5	14.2	8.2				
	0.33	72	22.2	81.6	23.9	40.7	11.9	6.7	78.2	22.9	39.6	11.6	7.3	74.7	21.9	38.5	11.3	7.9	71.0	20.8	37.3	10.9	8.5				
	2310	62	16.7	75.6	22.1	60.7	17.8	6.9	72.2	21.2	59.2	17.4	7.4	68.8	20.2	57.8	16.9	8.0	65.2	19.1	56.3	16.5	8.6				
	1090	67	19.4	82.7	24.2	51.3	15.0	7.1	79.2	23.2	49.9	14.6	7.7	75.6	22.2	48.6	14.2	8.3	71.6	21.0	47.1	13.8	9.0				
	0.26	72	22.2	89.5	26.2	41.5	12.2	7.3	85.8	25.1	40.2	11.8	8.0	81.9	24.0	38.9	11.4	8.7	77.6	22.8	37.4	11.0	9.4				
	3300	62	16.7	80.7	23.6	71.8	21.0	7.1	77.0	22.6	70.3	20.6	7.6	73.2	21.5	68.8	20.2	8.2	69.1	20.3	67.2	19.7	8.8				
	1557	67	19.4	88.5	25.9	59.6	17.5	7.3	84.6	24.8	58.2	17.1	7.9	80.5	23.6	56.7	16.6	8.6	76.0	22.3	55.2	16.2	9.3				
5109 [8.0]	0.31	72	22.2	95.8	28.1	47.0	13.8	7.5	91.7	26.9	45.6	13.4	8.2	87.3	25.6	44.2	13.0	8.9	82.5	24.2	42.7	12.5	9.6				
	3630	62	16.7	81.8	24.0	75.2	22.0	7.1	78.1	22.9	73.7	21.6	7.7	74.2	21.7	72.2	21.1	8.3	70.0	20.5	70.0	20.5	8.9				
	1713	67	19.4	89.8	26.3	62.1	18.2	7.4	85.8	25.1	60.7	17.8	8.0	81.6	23.9	59.2	17.4	8.7	77.0	22.6	57.6	16.9	9.3				
	0.33	72	22.2	97.3	28.5	48.6	14.2	7.5	93.0	27.3	47.2	13.8	8.2	88.5	26.0	45.8	13.4	9.0	83.6	24.5	44.3	13.0	9.7				
	2680	62	16.7	93.3	27.3	72.8	21.3	9.0	89.2	26.2	71.1	20.8	9.7	85.1	24.9	69.3	20.3	10.4	80.5	23.6	67.3	19.7	11.1				
	1265	67	19.4	101.9	29.9	61.8	18.1	9.4	97.6	28.6	60.1	17.6	10.1	93.1	27.3	58.4	17.1	10.9	88.1	25.8	56.5	16.6	11.7				
	0.26	72	22.2	110.1	32.3	50.3	14.7	9.8	105.5	30.9	48.7	14.3	10.5	100.4	29.4	46.9	13.8	11.3	95.0	27.8	45.1	13.2	12.2				
	3830	62	16.7	99.9	29.3	85.8	25.2	9.3	95.3	27.9	84.0	24.6	10.0	90.6	26.6	82.1	24.1	10.7	85.5	25.0	80.0	23.5	11.5				
5210 [8.9]	1807	67	19.4	109.3	32.0	71.6	21.0	9.7	104.4	30.6	69.8	20.5	10.5	99.1	29.1	67.9	19.9	11.2	93.4	27.4	65.9	19.3	12.1				
	0.31	72	22.2	118.2	34.6	56.8	16.6	10.1	112.8	33.1	55.0	16.1	10.9	106.8	31.3	53.1	15.6	11.8	103.7	30.4	52.1	15.3	12.2				
	4215	62	16.7	101.4	29.7	89.8	26.3	9.4	96.7	28.4	88.0	25.8	10.1	91.9	26.9	86.0	25.2	10.8	86.6	25.4	84.0	24.6	11.6				
	1989	67	19.4	111.0	32.5	74.5	21.8	9.8	106.0	31.1	72.7	21.3	10.5	100.5	29.5	70.8	20.8	11.3	94.6	27.7	68.7	20.1	12.2				
	0.33	72	22.2	120.0	35.2	58.7	17.2	10.2	114.4	33.5	56.9	16.7	11.0	108.2	31.7	54.9	16.1	11.9	105.0	30.8	53.9	15.8	12.3				
	3000	62	16.7	100.1	29.3	79.6	23.3	9.7	96.1	28.2	77.9	22.8	10.3	92.0	27.0	76.2	22.3	11.0	87.6	25.7	74.3	21.8	11.8				
	1416	67	19.4	109.6	32.1	67.5	19.8	10.1	105.4	30.9	65.8	19.3	10.8	101.0	29.6	64.1	18.8	11.6	96.3	28.2	62.4	18.3	12.5				
	0.26	72	22.2	118.6	34.8	54.7	16.0	10.4	114.1	33.5	53.1	15.6	11.2	109.4	32.1	51.5	15.1	12.1	104.4	30.6	49.8	14.6	13.0				
5111 [8.7]	4170	62	16.7	106.6	31.2	93.0	27.2	9.9	102.2	29.9	91.2	26.7	10.6	97.6	28.6	89.3	26.2	11.4	92.7	27.2	87.4	25.6	12.2				
	1968	67	19.4	116.9	34.3	77.4	22.7	10.3	112.2	32.9	75.7	22.2	11.1	107.2	31.4	73.9	21.7	11.9	102.0	29.9	72.1	21.1</					

# SKM Packaged Air Conditioners

## PACH Series - R22

### CAPACITY RATINGS - 50 HZ

Model PACH [EER]	AFR	Evaporator Entering WBT		Condenser Entering Air Temperature																							
				95°F (35°C)						105°F (40°C)						115°F (46°C)						125°F (52°C)					
				Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI				
		MBH	kW	MBH	kW	kW	MBH		kW	MBH	kW	kW		MBH	kW	MBH	kW		kW	MBH	kW	MBH		kW	kW		
5211 [8.8]	3350	62	16.7	109.5	32.1	87.9	25.8	10.8	105.1	30.8	86.0	25.2	11.7	100.5	29.5	84.1	24.7	12.7	95.6	28.0	82.0	24.0	13.7				
	1581	67	19.4	119.6	35.1	74.2	21.8	11.3	114.9	33.7	72.4	21.2	12.3	109.8	32.2	70.5	20.7	13.3	104.5	30.6	68.5	20.1	14.3				
	0.26	72	22.2	129.1	37.8	59.9	17.6	11.8	124.0	36.3	58.1	17.0	12.8	118.6	34.8	56.3	16.5	13.9	115.7	33.9	55.3	16.2	14.4				
	4800	62	16.7	116.7	34.2	104.1	30.5	11.2	111.8	32.8	102.2	29.9	12.1	106.6	31.3	100.1	29.3	13.1	101.1	29.6	97.9	28.7	14.1				
	2265	67	19.4	127.7	37.4	86.3	25.3	11.7	122.3	35.9	84.4	24.7	12.7	116.7	34.2	82.4	24.1	13.8	113.7	33.3	81.3	23.8	14.3				
	0.32	72	22.2	137.9	40.4	67.8	19.9	12.2	132.1	38.7	66.0	19.3	13.3	126.0	36.9	64.0	18.8	14.4	122.8	36.0	63.0	18.5	14.9				
	5270	62	16.7	118.3	34.7	109.0	31.9	11.2	113.3	33.2	106.9	31.3	12.2	108.0	31.6	104.9	30.7	13.2	102.3	30.0	102.3	30.0	14.0				
	2487	67	19.4	129.5	38.0	89.9	26.3	11.8	124.0	36.3	87.9	25.8	12.8	118.2	34.6	85.9	25.2	13.9	115.1	33.7	84.8	24.9	14.4				
0.33	72	22.2	139.9	41.0	70.1	20.6	12.3	133.9	39.3	68.2	20.0	13.4	127.6	37.4	66.3	19.4	14.5	124.4	36.5	65.3	19.1	15.0					
5112 [8.7]	3600	62	16.7	119.9	35.1	95.1	27.9	11.4	114.7	33.6	92.9	27.2	12.3	109.3	32.0	90.6	26.6	13.1	103.4	30.3	88.2	25.8	14.1				
	1699	67	19.4	131.1	38.4	80.6	23.6	11.9	125.6	36.8	78.4	23.0	12.8	119.7	35.1	76.2	22.3	13.7	113.1	33.2	73.7	21.6	14.8				
	0.26	72	22.2	141.8	41.6	65.3	19.1	12.4	135.8	39.8	63.2	18.5	13.3	129.2	37.9	60.9	17.9	14.3	122.0	35.7	58.5	17.2	15.5				
	5000	62	16.7	127.5	37.4	110.9	32.5	11.8	121.7	35.7	108.6	31.8	12.6	115.7	33.9	106.1	31.1	13.5	109.1	32.0	103.5	30.3	14.5				
	2360	67	19.4	139.7	40.9	92.3	27.1	12.3	133.4	39.1	90.0	26.4	13.2	126.7	37.1	87.6	25.7	14.2	119.3	35.0	85.0	24.9	15.3				
	0.31	72	22.2	151.1	44.3	73.1	21.4	12.8	144.2	42.3	70.8	20.8	13.8	136.5	40.0	68.4	20.0	14.8	128.4	37.6	65.8	19.3	16.0				
	5500	62	16.7	129.4	37.9	116.1	34.0	11.9	123.5	36.2	113.7	33.3	12.7	117.3	34.4	111.2	32.6	13.6	110.5	32.4	108.6	31.8	14.6				
	2595	67	19.4	141.8	41.6	96.2	28.2	12.4	135.4	39.7	93.9	27.5	13.3	128.4	37.6	91.4	26.8	14.3	120.8	35.4	88.7	26.0	15.4				
0.33	72	22.2	153.5	45.0	75.6	22.2	12.9	146.3	42.9	73.3	21.5	13.9	138.2	40.5	70.7	20.7	14.9	130.0	38.1	68.2	20.0	16.2					
5213 [8.5]	3925	62	16.7	127.4	37.3	102.3	30.0	11.8	122.4	35.9	100.2	29.4	12.8	117.2	34.3	98.0	28.7	13.9	111.6	32.7	95.7	28.0	15.0				
	1852	67	19.4	139.3	40.8	86.4	25.3	12.4	133.9	39.3	84.3	24.7	13.4	128.3	37.6	82.2	24.1	14.6	122.2	35.8	79.9	23.4	15.7				
	0.26	72	22.2	150.6	44.1	69.8	20.5	12.8	144.8	42.4	67.8	19.9	14.0	138.7	40.6	65.7	19.3	15.2	132.2	38.7	63.5	18.6	16.4				
	5450	62	16.7	135.2	39.6	119.4	35.0	12.2	129.6	38.0	117.1	34.3	13.2	123.9	36.3	114.8	33.6	14.3	117.7	34.5	112.3	32.9	15.4				
	2572	67	19.4	148.1	43.4	99.1	29.1	12.7	142.1	41.6	96.9	28.4	13.8	135.7	39.8	94.7	27.8	15.0	129.0	37.8	92.3	27.1	16.2				
	0.31	72	22.2	160.1	46.9	78.2	22.9	13.2	153.7	45.0	76.1	22.3	14.4	146.8	43.0	73.9	21.7	15.6	139.6	40.9	71.6	21.0	16.8				
	6000	62	16.7	137.2	40.2	125.0	36.6	12.3	131.5	38.5	122.7	36.0	13.3	125.5	36.8	120.4	35.3	14.4	119.2	34.9	117.9	34.6	15.5				
	2831	67	19.4	150.3	44.0	103.3	30.3	12.8	144.1	42.2	101.1	29.6	13.9	137.6	40.3	98.9	29.0	15.1	130.7	38.3	96.5	28.3	16.3				
0.33	72	22.2	162.6	47.6	80.9	23.7	13.3	155.9	45.7	78.8	23.1	14.5	148.9	43.6	76.6	22.4	15.7	141.5	41.5	74.2	21.8	16.9					
5215 [8.8]	4900	62	16.7	154.0	45.1	125.5	36.8	13.9	147.1	43.1	122.7	36.0	14.9	140.1	41.1	119.7	35.1	16.0	132.5	38.8	116.6	34.2	17.3				
	2312	67	19.4	168.6	49.4	105.9	31.0	14.4	161.4	47.3	103.1	30.2	15.5	153.9	45.1	100.3	29.4	16.8	145.7	42.7	97.2	28.5	18.2				
	0.26	72	22.2	182.5	53.5	85.3	25.0	14.8	174.8	51.2	82.6	24.2	16.1	166.8	48.9	79.9	23.4	17.5	158.0	46.3	77.0	22.6	18.9				
	6000	62	16.7	159.9	46.9	138.2	40.5	14.1	152.6	44.7	135.2	39.6	15.2	145.2	42.6	132.2	38.7	16.3	137.1	40.2	128.9	37.8	17.6				
	2831	67	19.4	175.3	51.4	115.3	33.8	14.6	167.6	49.1	112.4	33.0	15.8	159.6	46.8	109.5	32.1	17.1	150.8	44.2	106.4	31.2	18.5				
	0.29	72	22.2	189.9	55.7	91.5	26.8	15.0	181.7	53.3	88.8	26.0	16.3	173.1	50.7	86.1	25.2	17.8	163.7	48.0	83.0	24.3	19.2				
	6600	62	16.7	162.5	47.6	144.7	42.4	14.2	155.0	45.4	141.6	41.5	15.3	147.4	43.2	138.6	40.6	16.5	139.1	40.8	135.3	39.6	17.7				
	3115	67	19.4	178.2	52.2	120.1	35.2	14.7	170.3	49.9	117.2	34.4	15.9	162.1	47.5	114.3	33.5	17.2	153.1	44.9	111.1	32.6	18.6				
0.31	72	22.2	193.1	56.6	94.7	27.7	15.0	184.7	54.1	92.0	27.0	16.4	175.8	51.5	89.1	26.1	17.9	166.1	48.7	86.0	25.2	19.3					
5219 [8.9]	5400	62	16.7	198.9	58.3	161.4	47.3	18.6	190.0	55.7	157.5	46.1	20.0	180.6	52.9	153.4	45.0	21.4	170.4	49.9	149.0	43.7	22.9				
	2548	67	19.4	217.7	63.8	136.6	40.0	19.4	208.0	61.0	132.7	38.9	20.9	197.6	57.9	128.6	37.7	22.4	186.3	54.6	124.3	36.4	24.2				
	0.17	72	22.2	235.4	69.0	110.5	32.4	20.2	224.7	65.9	106.7	31.3	21.7	212.9	62.4	102.6	30.1	23.5	206.7	60.6	100.4	29.4	24.4				
	7000	62	16.7	210.9	61.8	184.1	53.9	19.1	201.0	58.9	179.9	52.7	20.5	190.4	55.8	175.5	51.5	22.0	179.1	52.5	170.9	50.1	23.6				
	3303	67	19.4	231.2	67.8	153.7	45.0	20.0	220.2	64.5	149.6	43.8	21.5	208.2	61.0	145.0	42.5	23.1	201.9	59.2	142.7	41.8	24.0				
	0.20	72	22.2	250.1	73.3	121.9	35.7	20.8	237.6	69.7	117.7	34.5	22.4	223.8	65.6	113.2	33.2	24.3	216.8	63.5	110.9	32.5	25.3				
	7700	62	16.7	214.8	63.0	193.3	56.7	19.3	204.5	59.9	189.0	55.4	20.7	193.6	56.7	184.6	54.1	22.2	181.8	53.3	179.8	52.7	23.8				
	3634	67	19.4	235.5	69.0	160.5	47.1	20.2	224.1	65.7	156.2	45.8	21.7	211.6	62.0	151.7	44.5	23.4	205.0	60.1	149.3	43.8	24.3				
0.22	72	22.2	254.8	74.7	126.4	37.1	21.0	241.7	70.9	122.1	35.8	22.7	227.2	66.6	117.4	34.4	24.6	219.9	64.4	115.0	33.7	25.6					
5222 [9.5]	6300	62	16.7	230.1	67.4	187.9	55.1	20.9	218.8	64.1	182.9	53.6	22.4	206.8	60.6	177.7	52.1	24.1	194.3	56.9	172.4	50.5	25.9				
	2973	67	19.4	251.8	73.8	158.8	46.6	21.7	239.7	70.3	154.0	45.1	23.4	226.9	66.5	149.0	43.7	25.3	213.5	62.6	143.9	42.2	27.3				
	0.17	72	22.2	272.3	79.8	128.3	37.6	22.5	259.3	76.0	123.7	36.3	24.4	245.7	72.0	119.0	34.9	26.4	231.5	67.9	114.1	33.4	28.6				
	8000	62	16.7	242.8	71.2	212.2	62.2	21.3	230.5	67.5	207.0	60.7	23.0														



# SKM Packaged Air Conditioners

## PACH Series - R22

Model PACH [EER]	AFR  cfm l/s [BPF]	Evaporator Entering WBT		Condenser Entering Air Temperature																							
				95°F (35°C)						105°F (40°C)						115°F (46°C)						125°F (52°C)					
				Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI				
		°F	°C	MBH	kW	MBH	kW	kW	MBH	kW	MBH	kW	kW	MBH	kW	MBH	kW	kW	MBH	kW	MBH	kW	kW				
6106 [8.5]	1600	62	16.7	56.9	16.7	44.1	12.9	5.7	54.7	16.0	43.1	12.6	6.1	52.4	15.4	42.1	12.4	6.5	50.0	14.6	41.1	12.0	7.0				
	755	67	19.4	62.3	18.2	37.5	11.0	6.0	59.9	17.6	36.6	10.7	6.4	57.4	16.8	35.6	10.4	6.9	54.8	16.1	34.6	10.1	7.4				
	0.26	72	22.2	67.3	19.7	30.6	9.0	6.2	64.8	19.0	29.7	8.7	6.7	62.2	18.2	28.8	8.4	7.2	59.4	17.4	27.9	8.2	7.7				
	2200	62	16.7	60.7	17.8	51.1	15.0	5.9	58.2	17.1	50.0	14.7	6.3	55.7	16.3	49.0	14.4	6.8	52.9	15.5	47.9	14.0	7.2				
	1038	67	19.4	66.4	19.5	42.8	12.5	6.2	63.8	18.7	41.8	12.2	6.6	61.1	17.9	40.8	11.9	7.1	58.1	17.0	39.7	11.6	7.5				
	0.31	72	22.2	71.9	21.1	34.1	10.0	6.4	69.1	20.3	33.2	9.7	6.9	66.1	19.4	32.2	9.4	7.4	64.6	18.9	31.7	9.3	7.7				
	2420	62	16.7	61.7	18.1	53.4	15.7	6.0	59.1	17.3	52.4	15.4	6.4	56.5	16.6	51.3	15.0	6.8	53.7	15.7	50.2	14.7	7.3				
	1142	67	19.4	67.6	19.8	44.5	13.0	6.2	64.9	19.0	43.5	12.7	6.7	62.0	18.2	42.5	12.5	7.2	59.0	17.3	41.4	12.1	7.7				
	0.32	72	22.2	73.1	21.4	35.3	10.3	6.4	70.2	20.6	34.3	10.1	6.9	67.2	19.7	33.3	9.8	7.5	65.6	19.2	32.8	9.6	7.7				
	6107 [8.4]	1730	62	16.7	60.4	17.7	46.8	13.7	6.3	58.2	17.0	45.8	13.4	6.8	55.8	16.3	44.8	13.1	7.4	53.1	15.6	43.7	12.8	8.0			
816		67	19.4	65.9	19.3	39.7	11.6	6.6	63.5	18.6	38.8	11.4	7.2	60.8	17.8	37.7	11.1	7.8	58.0	17.0	36.7	10.7	8.4				
0.27		72	22.2	71.1	20.8	32.3	9.5	6.9	68.4	20.1	31.4	9.2	7.5	65.6	19.2	30.4	8.9	8.1	64.1	18.8	29.9	8.8	8.4				
2400		62	16.7	64.3	18.9	54.3	15.9	6.5	61.8	18.1	53.3	15.6	7.1	59.0	17.3	52.2	15.3	7.7	56.1	16.4	51.0	14.9	8.2				
1133		67	19.4	70.2	20.6	45.3	13.3	6.8	67.4	19.8	44.3	13.0	7.4	64.5	18.9	43.2	12.7	8.1	62.9	18.4	42.7	12.5	8.4				
0.32		72	22.2	75.8	22.2	36.0	10.6	7.1	72.8	21.3	35.1	10.3	7.8	69.6	20.4	34.0	10.0	8.4	67.9	19.9	33.5	9.8	8.7				
2640		62	16.7	65.3	19.1	56.8	16.6	6.6	62.7	18.4	55.7	16.3	7.1	59.9	17.5	54.6	16.0	7.7	56.9	16.7	53.4	15.7	8.3				
1246		67	19.4	71.3	20.9	47.2	13.8	6.9	68.4	20.1	46.1	13.5	7.5	65.4	19.2	45.1	13.2	8.1	63.8	18.7	44.5	13.0	8.4				
0.34		72	22.2	76.9	22.5	37.2	10.9	7.2	73.8	21.6	36.2	10.6	7.8	70.5	20.7	35.2	10.3	8.5	68.8	20.2	34.6	10.2	8.8				
6108 [8.5]		2000	62	16.7	70.6	20.7	54.5	16.0	6.9	67.9	19.9	53.4	15.6	7.5	65.2	19.1	52.2	15.3	8.2	62.2	18.2	50.9	14.9	8.8			
	944	67	19.4	77.1	22.6	46.4	13.6	7.3	74.2	21.7	45.2	13.3	7.9	71.2	20.9	44.1	12.9	8.6	68.0	19.9	42.8	12.6	9.3				
	0.26	72	22.2	83.2	24.4	37.8	11.1	7.6	80.1	23.5	36.7	10.8	8.2	76.9	22.5	35.6	10.4	8.9	73.4	21.5	34.4	10.1	9.6				
	2750	62	16.7	75.1	22.0	63.0	18.5	7.2	72.1	21.1	61.8	18.1	7.8	69.1	20.2	60.6	17.8	8.4	65.7	19.3	59.2	17.4	9.1				
	1298	67	19.4	82.1	24.1	52.7	15.5	7.5	78.9	23.1	51.5	15.1	8.2	75.5	22.1	50.3	14.7	8.8	71.9	21.1	49.0	14.4	9.5				
	0.31	72	22.2	88.6	26.0	42.0	12.3	7.8	85.2	25.0	40.9	12.0	8.5	81.6	23.9	39.7	11.6	9.2	77.7	22.8	38.5	11.3	9.9				
	3025	62	16.7	76.3	22.4	65.9	19.3	7.2	73.2	21.5	64.7	19.0	7.8	70.1	20.5	63.4	18.6	8.5	66.7	19.5	62.0	18.2	9.2				
	1427	67	19.4	83.4	24.4	54.8	16.1	7.6	80.1	23.5	53.6	15.7	8.2	76.6	22.5	52.4	15.4	8.9	72.9	21.4	51.1	15.0	9.6				
	0.33	72	22.2	90.1	26.4	43.4	12.7	7.9	86.5	25.4	42.3	12.4	8.6	82.8	24.3	41.1	12.0	9.3	78.8	23.1	39.8	11.7	10.0				
	6109 [8.2]	2310	62	16.7	82.9	24.3	63.9	18.7	8.2	79.4	23.3	62.3	18.3	8.7	75.9	22.2	60.8	17.8	9.3	71.9	21.1	59.1	17.3	10.0			
1090		67	19.4	90.7	26.6	54.4	15.9	8.5	87.0	25.5	52.9	15.5	9.1	83.1	24.4	51.4	15.1	9.8	78.8	23.1	49.8	14.6	10.6				
0.26		72	22.2	97.9	28.7	44.4	13.0	8.7	94.0	27.6	43.0	12.6	9.4	89.9	26.4	41.6	12.2	10.2	85.3	25.0	40.0	11.7	11.0				
3300		62	16.7	89.0	26.1	75.2	22.0	8.4	85.1	24.9	73.6	21.6	9.0	81.0	23.8	71.9	21.1	9.7	76.6	22.4	70.1	20.6	10.4				
1557		67	19.4	97.4	28.5	62.9	18.4	8.7	93.3	27.3	61.3	18.0	9.4	88.9	26.1	59.7	17.5	10.1	84.1	24.6	58.0	17.0	10.9				
0.31		72	22.2	105.3	30.9	50.1	14.7	9.0	100.9	29.6	48.6	14.3	9.7	96.3	28.2	47.1	13.8	10.6	93.7	27.5	46.3	13.6	11.0				
3630		62	16.7	90.4	26.5	78.6	23.0	8.5	86.4	25.3	77.0	22.6	9.1	82.2	24.1	75.3	22.1	9.7	77.7	22.8	73.5	21.5	10.5				
1713		67	19.4	99.0	29.0	65.4	19.2	8.8	94.7	27.8	63.9	18.7	9.5	90.2	26.4	62.3	18.3	10.2	85.3	25.0	60.5	17.7	11.0				
0.33		72	22.2	107.0	31.4	51.7	15.2	9.0	102.5	30.1	50.3	14.7	9.8	97.7	28.6	48.7	14.3	10.7	95.1	27.9	47.9	14.0	11.1				
6110 [7.5]		2680	62	16.7												93.5	27.4	72.9	21.4	12.2	88.7	26.0	70.8	20.8	13.0		
	1265	67	19.4	111.5	32.7	65.6	19.2	11.1	107.0	31.4	63.8	18.7	11.9	102.2	30.0	61.9	18.2	12.7	97.0	28.4	59.9	17.6	13.7				
	0.26	72	22.2	120.3	35.2	53.9	15.8	11.5	115.5	33.8	52.2	15.3	12.3	110.3	32.3	50.4	14.8	13.2	107.6	31.5	49.4	14.5	13.7				
	3830	62	16.7	110.0	32.2	90.0	26.4	11.0	105.2	30.8	88.1	25.8	11.8	100.2	29.4	86.0	25.2	12.6	94.7	27.8	83.8	24.6	13.5				
	1807	67	19.4	120.1	35.2	75.6	22.2	11.5	115.0	33.7	73.7	21.6	12.3	109.6	32.1	71.7	21.0	13.2	106.6	31.3	70.6	20.7	13.7				
	0.31	72	22.2	129.7	38.0	60.6	17.8	11.9	124.2	36.4	58.7	17.2	12.8	118.1	34.6	56.8	16.6	13.8	114.9	33.7	55.7	16.3	14.3				
	4215	62	16.7	111.8	32.8	94.1	27.6	11.1	106.9	31.3	92.1	27.0	11.9	101.7	29.8	90.0	26.4	12.7	96.1	28.2	87.7	25.7	13.6				
	1989	67	19.4	122.1	35.8	78.6	23.0	11.5	116.9	34.2	76.7	22.5	12.4	111.2	32.6	74.6	21.9	13.3	108.2	31.7	73.5	21.6	13.8				
	0.33	72	22.2	131.9	38.6	62.6	18.3	12.0	126.1	37.0	60.7	17.8	12.9	119.9	35.1	58.7	17.2	13.9	116.5	34.2	57.6	16.9	14.4				
	6211 [8.4]	3000	62	16.7						105.9	31.1	82.2	24.1	12.1	101.6	29.8	80.3	23.5	12.9	97.0	28.4	78.3	23.0	13.8			
1416		67	19.4	120.4	35.3	71.7	21.0	11.8	115.9	34.0	69.9	20.5	12.6	111.3	32.6	68.1	20.0	13.5	106.3	31.2	66.2	19.4	14.5				
0.26		72	22.2	130.1	38.1	58.7	17.2	12.2	125.4	36.7	57.0	16.7	13.1	120.4	35.3	55.3	16.2	14.1	115.1	33.7	53.5	15.7	15.2				
4170		62	16.7	117.8	34.5	97.6	28.6	11.7	113.1	33.2	95.7	28.0	12.5	108.3	31.7	93.7	27.5	13.3	103.1	30.2	91.6	26.8	14.3				
1968		67	19.4	128.9	37.8	81.9	24.0	12.2	124.0	36.3	80.0	23.5	13.0	118.7	34.8	78.1	22.9	14.0	113.1	33.2	76.1	22.3	15.1				
0.31		72	22.2	139.5	40.																						

# SKM Packaged Air Conditioners

## PACH Series - R22

### CAPACITY RATINGS - 60 HZ

Model PACH [EER]	AFR  cfm l/s [BPF]	Evaporator Entering WBT		Condenser Entering Air Temperature																							
				95°F (35°C)						105°F (40°C)						115°F (46°C)						125°F (52°C)					
				Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI	Total Capacity		Sensible Capacity		PI				
		°F	°C	MBH	kW	MBH	kW	kW	MBH	kW	MBH	kW	kW	MBH	kW	MBH	kW	kW	MBH	kW	MBH	kW	kW				
6212 [8.4]	3350	62	16.7	120.8	35.4	92.8	27.2	12.6	116.2	34.1	90.8	26.6	13.7	111.4	32.7	88.8	26.0	14.8	106.2	31.1	86.5	25.4	15.9				
	1581	67	19.4	131.7	38.6	79.0	23.2	13.2	126.8	37.2	77.0	22.6	14.3	121.5	35.6	75.0	22.0	15.6	115.8	33.9	72.8	21.3	16.8				
	0.26	72	22.2	142.1	41.6	64.4	18.9	13.8	136.7	40.1	62.6	18.3	15.0	131.0	38.4	60.6	17.8	16.3	128.0	37.5	59.5	17.4	16.9				
	4800	62	16.7	129.5	38.0	109.3	32.0	13.1	124.3	36.4	107.2	31.4	14.2	118.8	34.8	105.0	30.8	15.4	112.9	33.1	102.6	30.1	16.5				
	2265	67	19.4	141.4	41.4	91.3	26.8	13.7	135.7	39.8	89.2	26.1	14.9	129.7	38.0	87.0	25.5	16.2	126.6	37.1	85.9	25.2	16.8				
	0.32	72	22.2	152.5	44.7	72.6	21.3	14.3	146.4	42.9	70.6	20.7	15.6	139.9	41.0	68.5	20.1	16.9	136.5	40.0	67.4	19.8	17.5				
	5270	62	16.7	131.4	38.5	114.2	33.5	13.2	126.1	37.0	112.1	32.8	14.3	120.4	35.3	109.8	32.2	15.5	114.3	33.5	107.4	31.5	16.6				
	2487	67	19.4	143.5	42.1	94.9	27.8	13.8	137.7	40.4	92.8	27.2	15.0	131.5	38.6	90.6	26.6	16.3	128.3	37.6	89.5	26.2	16.9				
	0.33	72	22.2	154.9	45.4	75.0	22.0	14.4	148.6	43.6	72.9	21.4	15.7	141.9	41.6	70.8	20.7	17.0	138.4	40.6	69.7	20.4	17.6				
6113 [8.2]	3600	62	16.7						126.4	37.1	98.0	28.7	14.3	120.7	35.4	95.5	28.0	15.3	114.6	33.6	92.8	27.2	16.4				
	1699	67	19.4	144.0	42.2	85.6	25.1	13.9	138.1	40.5	83.3	24.4	15.0	132.1	38.7	80.9	23.7	16.0	125.3	36.7	78.3	22.9	17.2				
	0.26	72	22.2	155.4	45.5	70.1	20.5	14.5	149.2	43.7	67.9	19.9	15.5	142.6	41.8	65.6	19.2	16.7	135.1	39.6	63.0	18.5	18.0				
	5000	62	16.7	140.9	41.3	116.4	34.1	13.8	134.8	39.5	113.9	33.4	14.8	128.5	37.6	111.3	32.6	15.8	121.5	35.6	108.5	31.8	16.9				
	2360	67	19.4	154.0	45.1	97.6	28.6	14.4	147.5	43.2	95.2	27.9	15.5	140.5	41.2	92.6	27.2	16.6	132.8	38.9	89.8	26.3	17.8				
	0.31	72	22.2	166.4	48.8	78.1	22.9	15.0	159.3	46.7	75.8	22.2	16.1	151.6	44.4	73.2	21.5	17.3	147.4	43.2	71.9	21.1	18.0				
	5500	62	16.7	143.2	42.0	121.6	35.7	13.9	136.9	40.1	119.1	34.9	14.9	130.4	38.2	116.5	34.1	15.9	123.2	36.1	113.6	33.3	17.1				
	2595	67	19.4	156.5	45.9	101.5	29.8	14.5	149.8	43.9	99.1	29.0	15.6	142.7	41.8	96.5	28.3	16.7	134.6	39.5	93.6	27.4	18.0				
	0.33	72	22.2	169.2	49.6	80.7	23.6	15.1	161.9	47.4	78.3	23.0	16.2	153.8	45.1	75.7	22.2	17.4	149.5	43.8	74.3	21.8	18.1				
6214 [8.1]	3925	62	16.7						135.0	39.6	105.6	31.0	15.0	129.6	38.0	103.3	30.3	16.3	123.8	36.3	100.7	29.5	17.6				
	1852	67	19.4	153.2	44.9	91.8	26.9	14.5	147.5	43.2	89.6	26.3	15.7	141.6	41.5	87.3	25.6	17.1	135.2	39.6	84.8	24.9	18.5				
	0.26	72	22.2	165.3	48.4	74.9	22.0	15.1	159.2	46.7	72.8	21.3	16.4	152.8	44.8	70.6	20.7	17.8	146.0	42.8	68.2	20.0	19.2				
	5450	62	16.7	149.6	43.9	125.3	36.7	14.3	143.7	42.1	122.8	36.0	15.5	137.6	40.3	120.3	35.3	16.8	131.0	38.4	117.7	34.5	18.2				
	2572	67	19.4	163.5	47.9	104.8	30.7	15.0	157.2	46.1	102.4	30.0	16.3	150.5	44.1	100.0	29.3	17.7	143.3	42.0	97.4	28.5	19.0				
	0.31	72	22.2	176.6	51.8	83.5	24.5	15.6	169.8	49.8	81.3	23.8	17.0	162.6	47.6	79.0	23.1	18.4	154.9	45.4	76.5	22.4	19.8				
	6000	62	16.7	152.0	44.6	131.0	38.4	14.4	145.9	42.8	128.5	37.7	15.7	139.6	40.9	126.0	36.9	17.0	132.9	38.9	123.3	36.1	18.3				
	2831	67	19.4	166.1	48.7	109.0	32.0	15.1	159.6	46.8	106.7	31.3	16.4	152.7	44.8	104.2	30.5	17.8	145.4	42.6	101.6	29.8	19.2				
	0.33	72	22.2	179.5	52.6	86.3	25.3	15.7	172.4	50.5	84.1	24.6	17.1	165.0	48.4	81.7	23.9	18.6	157.1	46.0	79.2	23.2	20.0				
6216 [8.2]	4900	62	16.7	169.3	49.6	132.1	38.7	16.5	162.0	47.5	129.0	37.8	17.6	154.6	45.3	125.8	36.9	18.9	146.4	42.9	122.4	35.9	20.2				
	2312	67	19.4	185.1	54.2	112.2	32.9	17.1	177.4	52.0	109.2	32.0	18.4	169.4	49.7	106.2	31.1	19.8	160.6	47.1	102.8	30.1	21.3				
	0.26	72	22.2	200.0	58.6	91.3	26.8	17.6	191.9	56.2	88.5	25.9	19.0	183.4	53.7	85.5	25.1	20.6	173.8	50.9	82.3	24.1	22.3				
	6000	62	16.7	176.4	51.7	145.0	42.5	16.7	168.6	49.4	141.8	41.6	17.9	160.7	47.1	138.5	40.6	19.2	151.9	44.5	134.9	39.5	20.7				
	2831	67	19.4	192.9	56.5	121.9	35.7	17.3	184.7	54.1	118.8	34.8	18.7	176.2	51.6	115.6	33.9	20.2	166.7	48.9	112.1	32.9	21.8				
	0.29	72	22.2	208.6	61.1	97.7	28.6	17.9	199.9	58.6	94.8	27.8	19.4	190.8	55.9	91.8	26.9	21.1	185.8	54.5	90.2	26.4	21.9				
	6600	62	16.7	179.4	52.6	151.6	44.4	16.8	171.5	50.3	148.3	43.5	18.1	163.3	47.9	145.0	42.5	19.4	154.2	45.2	141.3	41.4	20.8				
	3115	67	19.4	196.3	57.5	126.7	37.1	17.5	187.9	55.1	123.6	36.2	18.8	171.9	52.5	120.4	35.3	20.4	169.3	49.6	116.9	34.3	22.0				
	0.31	72	22.2	212.3	62.2	101.0	29.6	18.0	203.4	59.6	98.0	28.7	19.5	194.0	56.9	95.0	27.8	21.2	188.9	55.4	93.3	27.4	22.1				
6221 [8.2]	5400	62	16.7	219.1	64.2	170.5	50.0	21.9	209.6	61.4	166.1	48.7	23.5	199.6	58.5	161.7	47.4	25.1	188.8	55.3	156.9	46.0	26.9				
	2548	67	19.4	239.2	70.1	145.3	42.6	22.9	229.1	67.1	141.2	41.4	24.5	218.3	64.0	136.8	40.1	26.3	212.4	62.3	134.5	39.4	27.3				
	0.17	72	22.2	258.2	75.7	118.8	34.8	23.7	247.3	72.5	114.8	33.6	25.5	235.3	69.0	110.5	32.4	27.5	228.9	67.1	108.2	31.7	28.6				
	7000	62	16.7	233.2	68.4	193.6	56.7	22.6	222.7	65.3	189.0	55.4	24.2	211.6	62.0	184.3	54.0	25.9	199.4	58.4	179.2	52.5	27.8				
	3303	67	19.4	255.0	74.8	162.8	47.7	23.6	243.6	71.4	158.4	46.4	25.3	231.3	67.8	153.7	45.1	27.2	224.7	65.9	151.2	44.3	28.2				
	0.20	72	22.2	275.5	80.8	130.7	38.3	24.5	262.9	77.0	126.3	37.0	26.4	248.9	73.0	121.5	35.6	28.5	241.7	70.8	119.1	34.9	29.6				
	7700	62	16.7	237.9	69.7	202.9	59.5	22.8	227.0	66.5	198.3	58.1	24.4	215.4	63.1	193.6	56.7	26.1	202.8	59.4	188.3	55.2	28.0				
	3634	67	19.4	260.2	76.3	169.9	49.8	23.8	248.3	72.8	165.4	48.5	25.6	235.4	69.0	160.5	47.0	27.5	228.6	67.0	157.9	46.3	28.5				
	0.22	72	22.2	281.2	82.4	135.3	39.7	24.8	267.9	78.5	130.8	38.3	26.7	253.2	74.2	125.9	36.9	28.8	245.7	72.0	123.4	36.2	30.0				
6224 [8.8]	6300	62	16.7	254.1	74.5	198.7	58.2	24.5	242.2	71.0	193.3	56.6	26.3	229.4	67.2	187.6	55.0	28.2	215.9	63.3	181.6	53.2	30.3				
	2973	67	19.4	277.5	81.3	169.2	49.6	25.5	264.6	77.6	164.0	48.1	27.5	251.0	73.6	158.5	46.5	29.6	236.6	69.3	152.8	44.8	31.9				
	0.17	72	22.2	299.5	87.8	138.1	40.5	26.4	285.9	83.8	133.1	39.0	28.6	271.3	79.5	127.9	37.5	30.9	263.8	77.3	125.3	36.7	32.1				
	8000	62	16.7	269.3	78.9	223.5	65.5	25.2	25																		

# SKM Packaged Air Conditioners

## PACH Series - R22

### FAN PERFORMANCE

PACH	Air Flow		Internal Static		External Static Pressure in wg. (Pa)																					
	Rate		Pressure		0.00	(0)	0.25	(62)	0.50	(125)	0.75	(187)	1.00	(250)	1.25	(312)	1.50	(374)	1.75	(436)	2.00	(500)	2.25	(500)	2.50	(624)
	cfm	l/s	in.wg	Pa	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW	RPM	kW
5105 6106	1600	755	0.34	84	614	0.15	743	0.22	865	0.29	982	0.37	1092	0.45	1197	0.54	1296	0.63	1391	0.72	1481	0.80	1566	0.89	1649	0.98
	2200	1038	0.52	129	797	0.36	893	0.44	987	0.53	1078	0.63	1166	0.73	1253	0.83	1337	0.94	1418	1.06	1498	1.17	1575	1.29	1650	1.41
	2420	1142	0.6	149	865	0.47	954	0.56	1040	0.65	1124	0.75	1206	0.86	1286	0.97	1365	1.09	1441	1.21	1517	1.33	1590	1.46	1662	1.59
5106 6107	1730	816	0.37	93	652	0.19	772	0.26	887	0.33	997	0.41	1102	0.50	1203	0.59	1299	0.69	1391	0.78	1479	0.88	1564	0.97	1645	1.07
	2400	1133	0.59	147	859	0.46	948	0.55	1035	0.64	1119	0.74	1202	0.85	1283	0.96	1362	1.07	1439	1.19	1515	1.32	1588	1.44	1660	1.5
	2640	1246	0.68	169	933	0.60	1015	0.70	1094	0.80	1172	0.90	1248	1.01	1323	1.13	1397	1.25	1469	1.38	1540	1.51	1609	1.64	1678	1.78
5107 6108	2000	944	0.36	90	695	0.25	803	0.33	905	0.41	1005	0.49	1101	0.59	1195	0.69	1285	0.79	1372	0.89	1457	1.00	1538	1.11	1617	1.22
	2750	1298	0.57	141	917	0.62	998	0.71	1075	0.81	1151	0.92	1226	1.03	1299	1.14	1371	1.26	1442	1.39	1511	1.52	1580	1.65	1647	1.79
	3025	1427	0.65	162	998	0.81	1072	0.91	1144	1.02	1214	1.13	1282	1.25	1350	1.37	1417	1.50	1482	1.63	1547	1.76	1611	1.91	1674	2.05
5108 6109	2310	1090	0.35	86	498	0.23	622	0.32	736	0.41	841	0.51	936	0.61	1025	0.72	1107	0.83	1185	0.95	1257	1.08	1327	1.22	1392	1.36
	3300	1557	0.57	141	662	0.61	750	0.72	837	0.85	920	0.97	1001	1.10	1078	1.24	1152	1.37	1222	1.52	1290	1.66	1355	1.81	1418	1.97
	3630	1713	0.65	162	717	0.79	797	0.92	877	1.05	954	1.19	1030	1.33	1103	1.47	1173	1.62	1241	1.77	1306	1.92	1369	2.08	1430	2.24
5109 6110	2680	1265	0.35	86	396	0.21	511	0.33	613	0.47	705	0.61	789	0.76	867	0.92	939	1.08	1008	1.24	1072	1.40	1134	1.57		
	3830	1807	0.57	141	516	0.54	602	0.69	683	0.86	759	1.04	831	1.23	899	1.43	964	1.63	1026	1.84	1085	2.06	1142	2.28	1197	2.50
	4215	1989	0.65	162	557	0.70	636	0.86	711	1.04	783	1.23	851	1.43	916	1.64	978	1.86	1037	2.08	1095	2.31	1150	2.55		
5210 6211	3000	1416	0.35	86	404	0.26	511	0.38	609	0.52	698	0.67	780	0.84	856	1.00	928	1.18	995	1.35	1059	1.53	1120	1.72	1179	1.90
	4170	1968	0.54	135	519	0.62	601	0.77	678	0.94	752	1.13	821	1.33	888	1.53	952	1.75	1012	1.97	1071	2.19	1127	2.42	1181	2.66
	4730	2232	0.65	162	575	0.87	648	1.04	718	1.23	786	1.43	850	1.64	912	1.86	972	2.09	1029	2.33	1085	2.57	1139	2.82	1191	3.08
5111 6112	3350	1581	0.35	86	416	0.32	516	0.45	609	0.59	694	0.75	773	0.93	848	1.10	918	1.29	984	1.48	1047	1.67	1108	1.87	1165	2.07
	4800	2265	0.57	141	553	0.84	627	1.01	697	1.19	764	1.39	829	1.60	892	1.82	952	2.05	1010	2.28	1066	2.53	1120	2.78	1172	3.03
	5270	2487	0.65	162	598	1.09	666	1.27	731	1.47	793	1.67	854	1.89	913	2.13	970	2.37	1025	2.62	1079	2.87	1130	3.14	1181	3.41
5211 6212	3350	1581	0.35	86	416	0.32	516	0.45	609	0.59	694	0.75	773	0.93	848	1.10	918	1.29	984	1.48	1047	1.67	1108	1.87	1165	2.07
	4800	2265	0.57	141	553	0.84	627	1.01	697	1.19	764	1.39	829	1.60	892	1.82	952	2.05	1010	2.28	1066	2.53	1120	2.78	1172	3.03
	5270	2487	0.65	162	598	1.09	666	1.27	731	1.47	793	1.67	854	1.89	913	2.13	970	2.37	1025	2.62	1079	2.87	1130	3.14	1181	3.41
5112 6113	3600	1699	0.36	89	430	0.37	526	0.51	614	0.66	696	0.83	774	1.00	846	1.19	915	1.38	980	1.58	1043	1.78	1102	1.99	1159	2.20
	5000	2359	0.57	141	562	0.92	633	1.09	701	1.28	767	1.47	831	1.69	892	1.91	951	2.14	1008	2.38	1063	2.63	1116	2.89	1168	3.15
	5500	2595	0.65	162	609	1.20	674	1.38	737	1.58	798	1.79	858	2.02	915	2.25	971	2.50	1025	2.75	1077	3.01	1128	3.28	1178	3.55
5213 6214	3925	1852	0.36	89	445	0.45	534	0.59	618	0.74	697	0.92	771	1.10	842	1.30	909	1.50	973	1.71	1034	1.92	1093	2.14	1149	2.36
	5450	2572	0.57	141	584	1.12	650	1.30	714	1.49	777	1.69	837	1.91	895	2.14	952	2.38	1007	2.63	1060	2.89	1112	3.16	1162	3.43
	6000	2831	0.65	162	634	1.47	695	1.66	754	1.86	812	2.08	867	2.31	922	2.55	975	2.81	1027	3.07	1077	3.34	1127	3.62	1175	3.91
5215 6216	4900	2312	0.36	89	539	0.57	662	0.76	778	0.97	885	1.18	984	1.41	1076	1.65	1162	1.90	1243	2.17	1319	2.45	1391	2.74	1460	3.04
	6000	2831	0.47	117	633	0.98	734	1.21	833	1.45	928	1.70	1018	1.96	1104	2.23	1184	2.51	1261	2.80	1335	3.10	1405	3.41	1472	3.73
	6600	3115	0.54	135	685	1.28	778	1.53	869	1.79	958	2.06	1042	2.34	1124	2.63	1202	2.92	1276	3.23	1347	3.54	1416	3.87	1482	4.20
5219 6221	5400	2548	0.4	100	579	0.73	692	0.94	800	1.16	901	1.40	997	1.64	1086	1.89	1170	2.15	1249	2.43	1324	2.72	1396	3.01	1464	3.32
	7000	3303	0.58	145	717	1.50	805	1.76	891	2.04	976	2.32	1057	2.61	1136	2.91	1212	3.22	1284	3.53	1354	3.86	1422	4.19	1487	4.53
	7700	3634	0.67	167	779	1.96	858	2.25	937	2.54	1015	2.85	1091	3.16	1165	3.49	1237	3.82	1307	4.15	1374	4.50	1439	4.85		
5222 6224	6300	2973	0.39	97	448	0.65	556	0.93	655	1.24	746	1.58	830	1.94	908	2.31	982	2.70	1052	3.09	1118	3.49	1181	3.90		
	8000	3775	0.54	134	538	1.22	626	1.55	710	1.91	789	2.31	863	2.72	934	3.16	1002	3.61	1066	4.07	1128	4.54	1188	5.02		
	8800	4153	0.62	155	582	1.58	663	1.94	740	2.32	814	2.74	885	3.18	952	3.64	1017	4.12	1079	4.61	1139	5.11	1196	5.63		
5224 6227	7200	3398	0.46	115	495	0.92	591	1.22	682	1.56	766	1.93	845	2.32	919	2.73	990	3.15	1057	3.58	1121	4.02	1183	4.47		
	9000	4247	0.64	160	593	1.69	672	2.04	748	2.44	821	2.86	890	3.31	957	3.77	1021	4.25	1082	4.75	1142	5.26	1199	5.78		
	9900	4672	0.74	185	641	2.19	714	2.58	785	2.99	852	3.44	917	3.91	980	4.41	1041	4.92	1100	5.44	1157	5.99				

#### Notes :

1. Areas shaded in grey indicate the operating range of a standard fan motor; out of this range shift to next larger motor size.
2. Internal static pressure is based on pressure drops through evaporator coil, fan casing and 2" washable flat filters.
3. For external static pressure more than 2.5 in.wg. (625 Pa), consult SKM.



# SKM Packaged Air Conditioners PACH Series - R22

## Field Connections

PACH series self-contained heavy duty air cooled packaged units are designed for minimum field interaction.

Power hook-ups and control wiring of thermostat as per Electrical hook-up diagram is all that is required to electrically connect any model of PACH series .

Every PACH series package air conditioning unit requires, at most, field installed fused disconnect switches or circuit breakers, and a 24 volt control thermostat.

Refer to typical wiring diagram on page 15 for a schematic representation of required field electrical hook-ups for a standard PACH series packaged air conditioning unit.

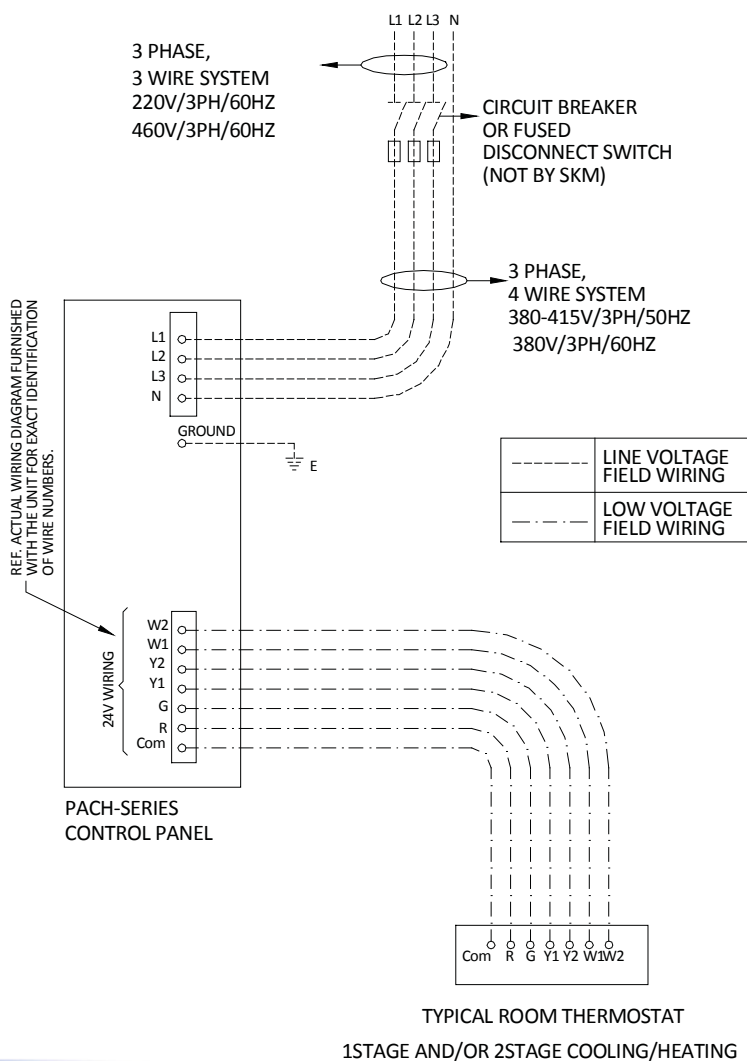
All field wiring must be done in accordance with applicable local and national codes.

For maximum recommended fuse sizes and minimum circuit amps for cable sizing, see Page 16 of this bulletin.

Duct work should be connected with flexible connections to the PACH series. One or two drains suitably trapped, are required to be connected to the drain outlet of all models of PACH series.

The PACH series series is then ready to provide cooling, on demand. See Installation, Operation and Maintenance Bulletin for full details on field connections and requirements.

## Field Wiring Requirement Schematic

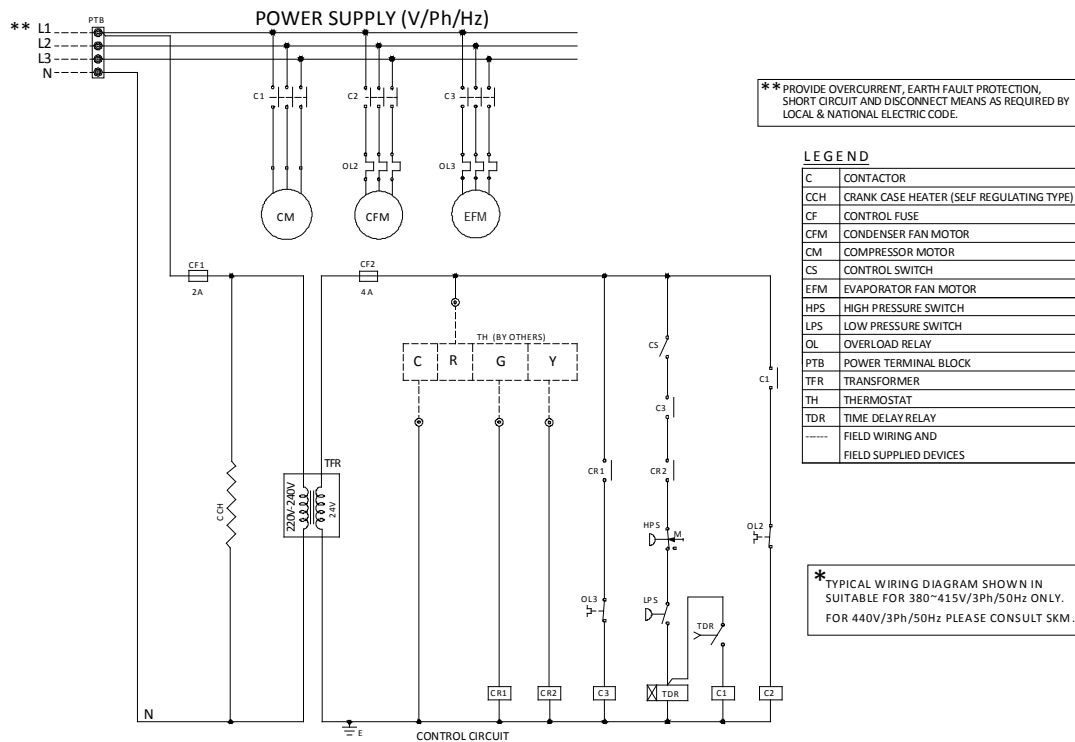




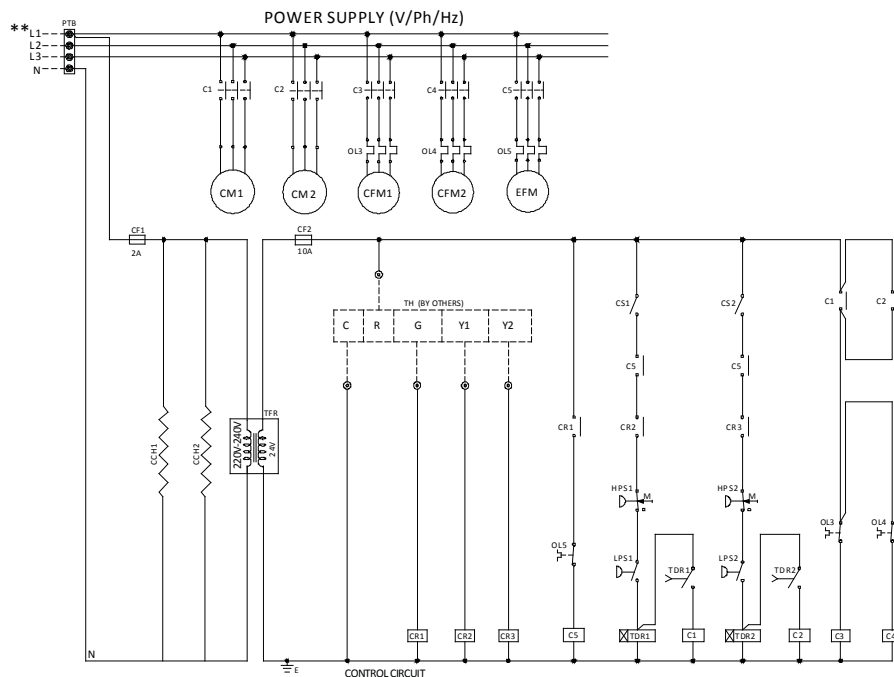
# SKM Packaged Air Conditioners PACH Series - R22

## Typical Wiring Diagram

PACH Model 5105 ~ 5109, 5111, 5112 & 6106 ~ 6110, 6112, 6113



PACH Model 5210, 5211, 5213 ~ 5224 & 6211, 6212, 6214 ~ 6227



**\*\* Provide overcurrent, short circuit, earth fault protection & disconnect means as required by local & national electric code. (3). Standard Panel Enclosure : IP 54 rated.**

### Legend

**C** = Contactor  
**CCH** = Crank Case Heater (Self Regulating)  
**CFM** = Condenser Fan Motor

**CM** = Compressor Motor  
**CS** = Control Switch  
**EFM** = Evaporator Fan Motor  
**HPS** = High Pressure Switch

**LPS** = Low Pressure Switch  
**OL** = Overload Relay  
**TDR** = Time Delay Relay  
**TFR** = Transformer

**TH** = Thermostat  
----- = Field Wiring & Field Supplied Devices



# SKM Packaged Air Conditioners

## PACH Series - R22

### Electrical Data

*380 415 V / 3 PH / 50 HZ ( Tolerance: 342 440 V )*

MODEL PACH	Unit Characteristic		Compressor				Condenser Fan Motor			Evaporator Fan Motor	
	MFA	MCA	QTY	MCC each	RLA each	LRA each	QTY	FLA each	LRA each	FLA	LRA
5105	32	19	1	15	10.7	67	1	1.4	4.7	2.6	11.6
5106	32	20	1	15.5	11.1	80	1	1.4	4.7	2.6	11.6
5107	40	23	1	18	12.9	80	1	2.2	8.7	2.6	11.6
5108	50	29	1	22	15.7	90	1	3.4	14.4	3.7	17.1
5109	63	36	1	27	19.3	105	1	4.2	18.7	5.2	25.6
5210	50	34	2	15	10.7	67	2	1.4	4.7	5.2	25.6
5111	63	38	1	30	21.4	115	1	4.2	18.7	5.2	25.6
5211	50	35	2	15.5	11.1	80	2	1.4	4.7	5.2	25.6
5112	63	44	1	36	25.7	140	1	4.2	18.7	5.2	25.6
5213	63	43	2	18	12.9	80	2	2.2	8.7	7.1	35.1
5215	80	51	2	22	15.7	90	2	3.4	14.4	7.1	35.1
5219	100	61	2	27	19.3	105	2	4.2	18.7	7.1	35.1
5222	100	66	2	30	21.4	115	2	4.2	18.7	7.1	35.1
5224	125	77	2	36	25.7	140	2	4.2	18.7	9.2	49.4

*380 V / 3 PH / 60 HZ ( Tolerance: 342 418 V )*

MODEL PACH	Unit Characteristic		Compressor				Condenser Fan Motor			Evaporator Fan Motor	
	MFA	MCA	QTY	MCC each	RLA each	LRA each	QTY	FLA each	LRA each	FLA	LRA
6106	32	22	1	17.5	12.5	72	1	1.7	5.6	2.6	10.3
6107	40	23	1	18.5	13.2	100	1	1.7	5.6	2.6	10.3
6108	40	28	1	22.5	16.1	102	1	3.2	12.2	2.6	10.3
6109	50	32	1	26	18.6	110	1	3.8	16	3.4	15.3
6110	63	39	1	30	21.4	150	1	5.4	27.5	4.9	22.8
6211	63	38	2	17.5	12.5	72	2	1.7	5.6	4.9	22.8
6112	80	48	1	40	28.6	165	1	5.4	27.5	4.9	22.8
6212	63	40	2	18.5	13.2	100	2	1.7	5.6	4.9	22.8
6113	80	53	1	46	32.9	165	1	5.4	27.5	4.9	22.8
6214	80	51	2	22.5	16.1	102	2	3.2	12.2	6.7	31.3
6216	100	58	2	26	18.6	110	2	3.8	16	6.7	31.3
6221	100	68	2	30	21.4	150	2	5.4	27.5	6.7	31.3
6224	125	84	2	40	28.6	165	2	5.4	27.5	6.7	31.3
6227	160	95	2	46	32.9	165	2	5.4	27.5	8.4	44

*460 V / 3 PH / 60 HZ ( Tolerance: 414 506 V )*

MODEL PACH	Unit Characteristic		Compressor				Condenser Fan Motor			Evaporator Fan Motor	
	MFA	MCA	QTY	MCC each	RLA each	LRA each	QTY	FLA each	LRA each	FLA	LRA
6106	32	19	1	15	10.7	67	1	1.6	6.6	2.3	12
6107	32	20	1	15.5	11.1	80	1	1.7	6.6	2.3	12
6108	40	23	1	18	12.9	80	1	2.9	14.4	2.3	12
6109	50	29	1	22	15.7	90	1	3.7	17.3	3.4	18
6110	63	36	1	27	19.3	105	1	5	31.6	4.5	26.4
6211	50	34	2	15	10.7	67	2	1.7	6.6	4.5	26.4
6112	63	38	1	30	21.4	115	1	5	31.6	4.5	26.4
6212	50	35	2	15.5	11.1	80	2	1.6	6.6	4.5	26.4
6113	63	44	1	36	25.7	140	1	5	31.6	4.5	26.4
6214	63	43	2	18	12.9	80	2	2.9	14.4	6.2	36.5
6216	80	51	2	22	15.7	90	2	3.7	17.3	6.2	36.5
6221	100	62	2	27	19.3	105	2	5	31.6	6.2	36.5
6224	100	66	2	30	21.4	115	2	5	31.6	6.2	36.5
6227	125	78	2	36	25.7	140	2	5	31.6	7.8	51

#### NOTE :

For power supply 460 V 3 Ph 60 Hz, models 6107 & 6211 have Condenser motor of 0.75 KW instead of 0.55 KW

# SKM Packaged Air Conditioners

## PACH Series - R22

### Electrical Data

220 V / 3 PH / 60 HZ ( Tolerance: 208 253 V )

MODEL PACH	Unit Characteristic		Compressor				Condenser Fan Motor			Evaporator Fan Motor	
	MFA	MCA	QTY	MCC each	RLA each	LRA each	QTY	FLA each	LRA each	FLA	LRA
6106	50	35	1	29	20.7	137	1	3	9.7	4.5	17.8
6107	63	37	1	31	22.1	135	1	3	9.7	4.5	17.8
6108	63	44	1	36	25.7	140	1	5.5	21.2	4.5	17.8
6109	80	53	1	43	30.7	157	1	6.7	27.7	5.9	26.5
6110	100	68	1	54	38.6	210	1	9.4	47.6	8.3	39.5
6211	100	63	2	29	20.7	137	2	3	9.7	8.3	39.5
6112	125	77	1	64	45.7	259	1	9.4	47.6	8.3	39.5
6212	100	66	2	31	22.1	137	2	3	9.7	8.3	39.5
6113	125	82	1	70	50	259	1	9.4	47.6	8.3	39.5
6214	125	82	2	36	25.7	140	2	5.5	21.2	11.5	54.3
6216	160	96	2	43	30.7	157	2	6.7	27.7	11.5	54.3
6221	200	119	2	54	38.6	210	2	9.4	47.6	11.5	54.3
6224	200	135	2	64	45.7	259	2	9.4	47.6	11.5	54.3
6227	250	148	2	70	50	259	2	9.4	47.6	14.7	76.2

440 V / 3 PH / 50 HZ ( Tolerance: 400 462 V )

MODEL PACH	Unit Characteristic		Compressor				Condenser Fan Motor			Evaporator Fan Motor	
	MFA	MCA	QTY	MCC each	RLA each	LRA each	QTY	FLA each	LRA each	FLA	LRA
5105	32	19	1	15	10.7	67	1	1.1	4.3	2.3	11.2
5106	32	19	1	15.5	11.1	80	1	1.1	4.3	2.3	11.2
5107	32	22	1	18	12.9	80	1	1.9	7.9	2.3	11.2
5108	40	28	1	22	15.7	90	1	2.7	13.1	3.2	16
5109	50	34	1	27	19.3	105	1	3.6	16	4.7	25
5210	50	33	2	15	10.7	67	2	1.1	4.3	4.7	25
5111	63	37	1	30	21.4	115	1	3.6	16	4.7	25
5211	50	34	2	15.5	11.1	80	2	1.1	4.3	4.7	25
5112	63	42	1	36	25.7	140	1	3.6	16	4.7	25
5213	63	41	2	18	12.9	80	2	1.9	7.9	6.5	33.5
5215	80	49	2	22	15.7	90	2	2.7	13.1	6.5	33.5
5219	100	59	2	27	19.3	105	2	3.6	16	6.5	33.5
5222	100	64	2	30	21.4	115	2	3.6	16	6.5	33.5
5224	125	75	2	36	25.7	140	2	3.6	16	8	43

### LEGEND

**MCC** - Maximum Continuous Current corresponding to the cutout amps of internal motor protection

**RLA** - Rated Load Amps

**FLA** - Full Load Amps

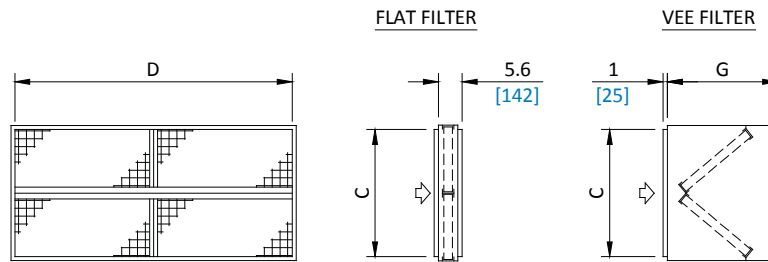
**LRA** - Locked Rotor Amps

**MCA** - Minimum Circuit Amps for wire sizing

**MFA** - Maximum Fuse Amps for unit fuse sizing

# SKM Packaged Air Conditioners PACH Series - R22

## Filter Dimensions & Sizes



MODEL PACH-	C	D	G	FLAT FILTER SIZE H x L	QTY.	VEE FILTER SIZE H x L	QTY.
5105 6106	20 [508]	33.6 [853]	20 [508]	20x16[508x406]	2	16x16[406x406]	4
5106 6107	20 [508]	33.6 [853]	20 [508]	20x16[508x406]	2	16x16[406x406]	4
5107 6108	20 [508]	39.6 [1006]	20 [508]	20x20[508x508]	2	16x20[406x508]	4
5108 6109	24 [610]	39.6 [1006]	22 [559]	25x20[635x508]	2	20x20[508x508]	4
5109 6110	24 [610]	46 [1168]	22 [559]	25x25[635x635] 25x20[635x508]	1 1	20x25[508x635] 20x20[508x508]	2 2
5210 6211	24 [610]	51.6 [1311]	22 [559]	25x20[635x508] 25x16[635x406]	1 2	20x20[508x508] 20x16[508x406]	2 4
5111 6112	30 [762]	46 [1168]	26 [660]	16x25[406x635] 16x20[406x508]	2 2	25x25[635x635] 25x20[635x508]	2 2

MODEL PACH-	C	D	G	FLAT FILTER SIZE H x L	QTY.	VEE FILTER SIZE H x L	QTY.
5211 6212	24 [610]	57.5 [1460]	22 [559]	25x20[635x508] 25x16[635x406]	2 1	20x20[508x508] 20x16[508x406]	4 2
5112 6113	30 [762]	48 [1219]	25 [635]	16x25[406x635]	4	25x25[635x635]	4
5213 6214	24 [610]	65.4 [1661]	22 [559]	25x25[635x635] 25x16[635x406]	2 1	20x25[508x635] 20x16[508x406]	4 2
5215 6216	30 [762]	65.4 [1661]	25 [635]	16x25[406x635] 16x16[406x406]	4 2	25x25[635x635] 25x16[635x406]	4 2
5219 6221	30 [762]	72 [1829]	26 [660]	16x20[406x508] 16x16[406x406]	4 4	25x20[635x508] 25x16[635x406]	4 4
5222 6224	36 [914]	72 [1829]	22 [559]	20x20[508x508] 20x16[508x406] 16x20[406x508] 16x16[406x406]	2 2 2 2	20x20[508x508] 20x16[508x406] 20x16[508x406]	6 6 6

## COMPONENT AIR PRESSURE DROP

Component		Coil Face Velocity							
		fpm	300	350	400	450	500	550	600
		m/s	1.5	1.8	2	2.3	2.5	2.8	3
Flat filters	1" cleanable aluminium flat filter	in.wg.	0.02	0.03	0.05	0.06	0.07	0.09	0.12
		Pa	5	8	13	15	18	23	31
	2" cleanable aluminium flat filter	in.wg.	0.05	0.07	0.1	0.12	0.18	0.22	0.26
		Pa	13	18	25	31	46	56	66
	1"activated carbon filter (disposable)	in.wg.	0.13	0.16	0.2	0.26	N.R.	N.R.	N.R.
		Pa	33	40	51	66	N.R.	N.R.	N.R.
Vee filters	1"activated carbon filter (disposable)	in.wg.	0.1	0.12	0.16	0.2	0.25	N.R.	N.R.
		Pa	25	31	41	51	64	N.R.	N.R.
	2" activated carbon filter (disposable)	in.wg.	0.01	0.015	0.025	0.03	0.035	0.045	0.06
		Pa	3	4	6	8	19	11	15
	2" cleanable aluminium flat filter	in.wg.	0.025	0.035	0.05	0.06	0.09	0.11	0.13
		Pa	6	9	13	15	23	28	33
Bag filters*	22" depth	in.wg.	0.22	0.3	0.38	0.49	0.6	0.73	0.86
		Pa	56	76	97	124	152	185	218
	30" depth	in.wg.	0.2	0.27	0.35	0.45	0.55	0.67	0.79
		Pa	51	69	89	114	140	170	201
	36" depth	in.wg.	0.18	0.25	0.32	0.41	0.5	0.61	0.72
		Pa	46	64	81	104	127	155	183

\* Initial pressure drop based on 95% bag filter dust spot efficiency.

N.R. = Not Recommended

All models are 4 row / 10 fpi

Component		Coil Face Velocity							
		fpm	300	350	400	450	500	550	600
		m/s	1.5	1.8	2	2.3	2.5	2.8	3
Electric Heater		in.wg.	0.01	0.02	0.024	0.028	0.035	0.04	0.045
		Pa	3	5	6	7	9	10	11
Casing	All units	in.wg.	0.15	0.15	0.15	0.15	0.15	0.15	0.15
		Pa	38	38	38	38	38	38	38
Evaporator Coil 3R-10FPI	BPF		0.24	0.26	0.28	0.3	0.32	0.33	0.35
		in.wg	0.07	0.1	0.12	0.15	0.18	0.21	0.25
	PD dry	Pa	18	25	31	38	46	53	64
		in.wg	0.09	0.13	0.16	0.2	0.23	0.27	0.33
	PD wet	Pa	23	33	41	51	58	69	84
Evaporator Coil 4R-10FPI	BPF		0.15	0.17	0.19	0.2	0.22	0.23	0.24
		in.wg	0.1	0.13	0.16	0.2	0.24	0.28	0.33
	PD dry	Pa	25	33	41	51	61	71	84
		in.wg	0.13	0.17	0.21	0.26	0.31	0.36	0.43
	PD wet	Pa	33	43	53	66	79	91	109
Moisture Eliminator		in.wg	0.03	0.04	0.06	0.08	0.1	0.11	0.12
		Pa	8	10	15	20	25	28	30

Standard number of rows & fin spacing for models are:

PACH Models	No. of Rows	Fin Spacing (fpi)
5105 to 5215	3	10
6106 to 6216		
5219 to 5224	4	
6221 to 6227		

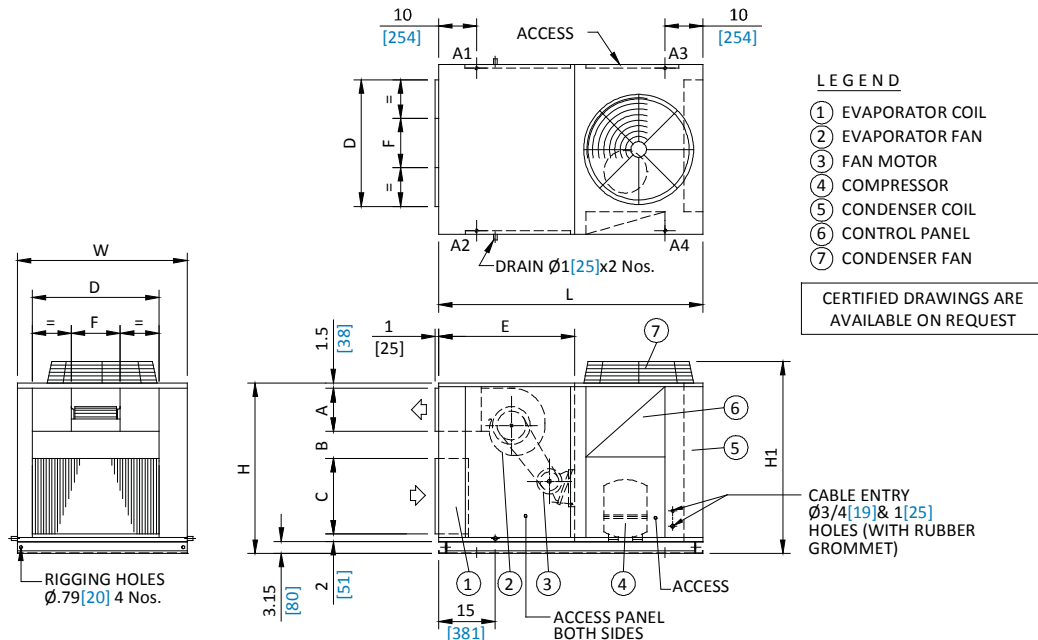


# SKM Packaged Air Conditioners PACH Series - R22

## Dimensional Data

PACH Models: 5105, 5106, 5107, 5108, 5109, 5111, 5112

PACH Models: 6106, 6107, 6108, 6109, 6110, 6112, 6113



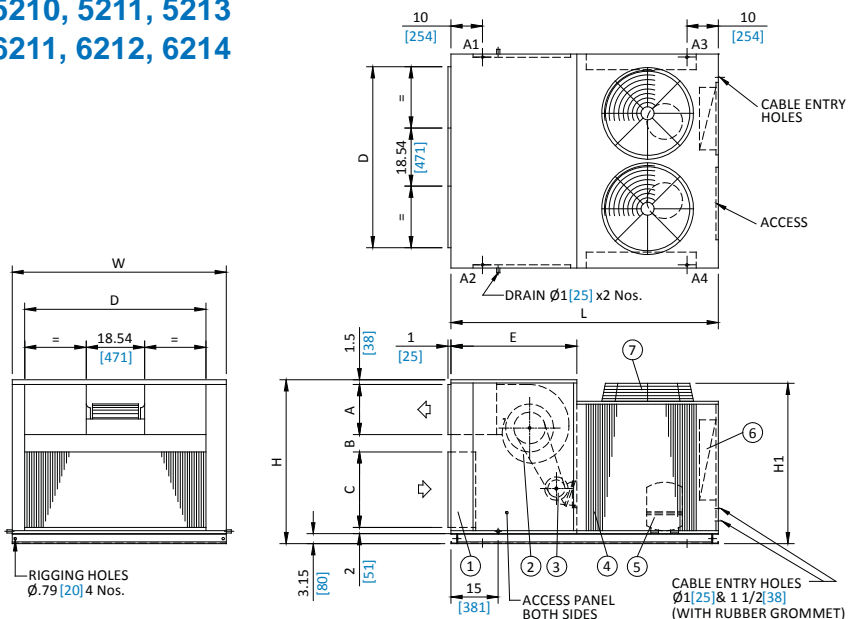
ALL DIMENSIONS ARE IN INCHES [MM]

A1-A4 ARE LOADING POINTS Ø0.79[20]

MODEL PACH-	L	W	H	H1	A	B	C	D	E	F	LOAD AT EACH POINT Lbs(Kg)				TOTAL WEIGHT
											A1	A2	A3	A4	
5105 6106	70	45	45.27	50.98	11.38	7.24	20	33.6	36	13.03	137 (62)	142 (64)	208 (94)	215 (98)	702 (318)
5106 6107	70	45	45.27	50.98	11.38	7.24	20	33.6	36	13.03	137 (62)	142 (64)	209 (95)	216 (98)	704 (319)
5107 6108	74	56	49.58	58.98	13.43	5.5	24	39.6	40	15.55	157 (71)	159 (72)	233 (106)	263 (119)	812 (368)
5108 6109	74	56	53.27	58.98	13.43	5.5	24	39.6	40	15.55	176 (80)	177 (80)	271 (123)	301 (137)	925 (420)
5109 6110	82	56	53.27	58.98	15.91	6.71	30	46	40	18.54	226 (102)	234 (106)	281 (127)	340 (154)	1081 (490)
5111 6112	82	56	58.06	58.98	15.91	5.5	30	46	40	18.54	233 (106)	241 (109)	309 (140)	372 (169)	1155 (524)
5112 6113	82	62	58.06	58.98	15.91	5.5	30	48	40	18.54	242 (110)	251 (114)	328 (149)	395 (179)	1216 (551)

PACH Models: 5210, 5211, 5213

PACH Models: 6211, 6212, 6214



# SKM Packaged Air Conditioners

## PACH Series - R22

### Dimensional Data

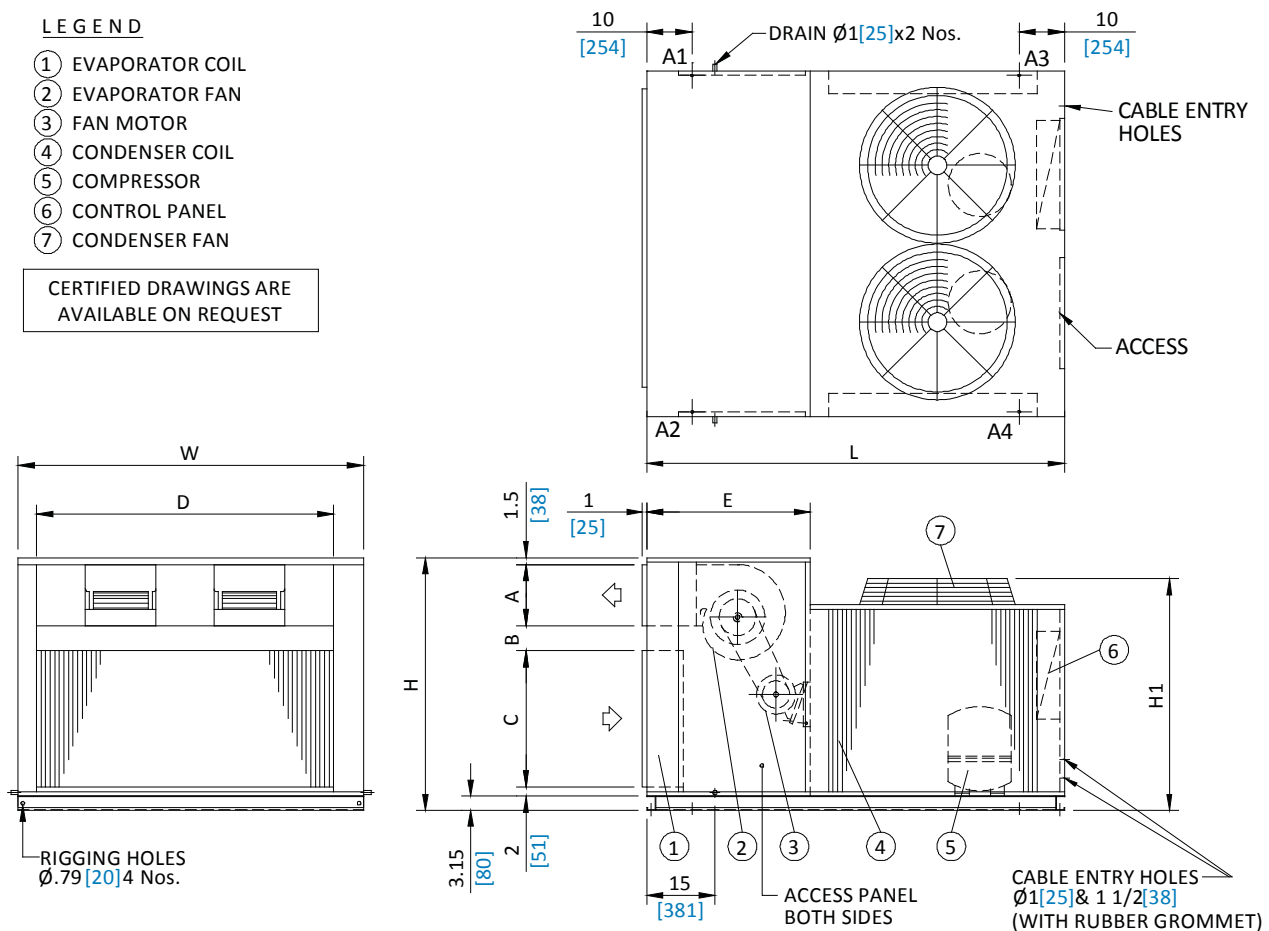
PACH Models: 5215, 5219, 5222, 5224

PACH Models: 6216, 6221, 6224, 6227

#### LEGEND

- ① EVAPORATOR COIL
- ② EVAPORATOR FAN
- ③ FAN MOTOR
- ④ CONDENSER COIL
- ⑤ COMPRESSOR
- ⑥ CONTROL PANEL
- ⑦ CONDENSER FAN

CERTIFIED DRAWINGS ARE  
AVAILABLE ON REQUEST



ALL DIMENSIONS ARE IN INCHES[MM]

A1-A4 ARE LOADING POINTS Ø0.79[20]

MODEL PACH-	L	W	H	H1	A	B	C	D	E	LOAD AT EACH POINT Lbs (Kg)				TOTAL WEIGHT
										A1	A2	A3	A4	
5210 6211	85 [2159]	68 [1727]	52.06 [1322]	50.98 [1295]	15.91 [404]	5.5 [140]	24 [610]	51.6 [1311]	40 [1016]	245 (111)	245 (111)	376 (171)	352 (160)	1218 (552)
5211 6212								57.5 [1460]		249 (113)	249 (113)	379 (172)	355 (161)	1232 (559)
5213 6214	96 [2438]	76 [1930]	55.58 [1412]	58.98 [1498]	13.43 [341]	5.5 [140]	30 [762]	65.4 [1661]	36 [914]	299 (136)	299 (136)	411 (186)	385 (175)	1394 (632)
5215 6216	92 [2337]									358 (162)	330 (150)	474 (215)	439 (199)	1601 (726)
5219 6221	96 [2438]	84 [2134]	63.56 [1614]	58.98 [1498]	15.91 [404]	5 [127]	36 [914]	72 [1829]	40 [1016]	404 (183)	383 (174)	528 (240)	498 (226)	1813 (823)
5222 6224										447 (203)	424 (192)	585 (265)	542 (246)	1998 (906)
5224 6227	102 [2591]	84 [2134]	63.56 [1614]	58.98 [1498]	15.91 [404]	5 [127]	36 [914]	72 [1829]	40 [1016]	475 (215)	448 (203)	602 (273)	557 (253)	2082 (944)

# SKM Packaged Air Conditioners PACH Series - R22

## Space & Location Requirements

PACH series Packaged Air-Conditioners should be located on a flat base either on the ground or on a roof top strong enough to hold the operating weight of the selected model.

The unit should be located with free and unhindered provision for supply of ambient air to the condenser coil and removal of heated air from it. The unit should not be located in the vicinity of steam, hot air or fume exhausts.

Site units away from noise sensitive places or consider suitable anti-vibration mounts with other treatment to minimize noise and vibration transmission. Do not duct or obstruct condenser fan discharge in any way.

Consider option CGP/CGG if located on ground level where protection against vandalism is desired.

For parallel location of multiple units a minimum clearance between the units must be 50% more than the recommended clearance for single unit installation.

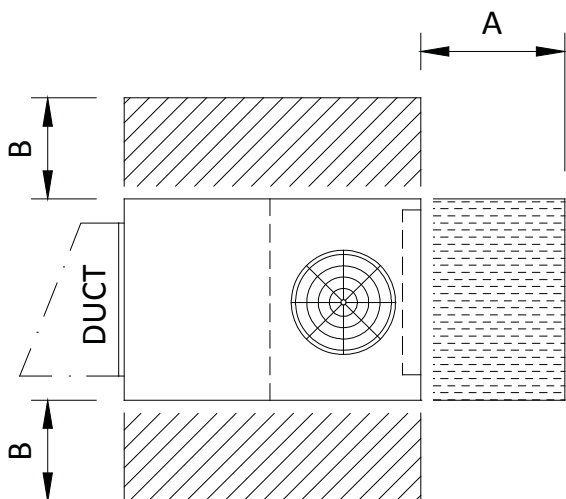
Model PACH		A	B
5105	6106	40 (1016)	30 (762)
5106	6107		
5107	6108		
5108	6109	48 (1219)	36 (914)
5109	6110		
5210	6211	40 (1016)	30 (762)
5111	6112	48 (1219)	36 (914)
5211	6212	40 (1016)	30 (762)
5112	6113	48 (1219)	36 (914)
5213	6214	40 (1016)	30 (762)
5215	6216		
5219	6221	48 (1219)	36 (914)
5222	6224		
5224	6227		



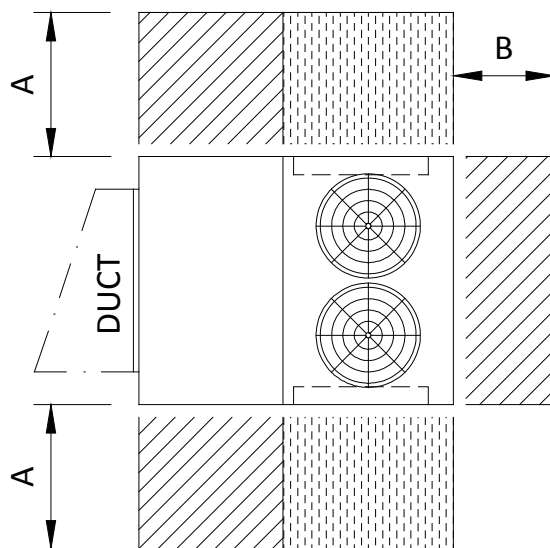
SPACING FOR SERVICE  
AND ACCESS



SPACING FOR AIR FLOW



5105-5109, 5111, 5112  
6106-6110, 6112, 6113



5210, 5211, 5213-5224  
6211, 6212, 6214-6227

# SKM Packaged Air Conditioners PACH Series - R22

## GUIDE SPECIFICATIONS

### GENERAL FEATURES

Packaged air conditioners shall be composed of compressor(s), condenser & evaporator coils with fans, refrigerant piping, electrical components & enclosing cabinet in one piece.

These units shall be factory assembled, internally wired, fully refrigerant charged with R22, tested under strict quality standards & are suitable for outdoor installation on rooftop or ground level with ducted system.

Units should be capable to operate from 50°F (10°C) to 125°F (52°C) ambient temperature, and shall be selected in accordance with project requirements and installed as per Installation, Operation & Maintenance Manual.

### COMPRESSOR(S)

Compressor(s) shall be hermetic reciprocating; refrigerant gas cooled, furnished with internal overload protection device, internal pressure relief valve, crankcase heater & shall be mounted on spring vibration isolators.

These compressors conform to internationally recognized standards like NF, VDE, CSA & UL.

### CONDENSER COIL(S)

Condenser coils shall be air cooled with integral sub cooler, constructed of seamless copper tubes 3/8" OD mechanically expanded into wavy plate type aluminum fins with maximum 12 fpi (2.1mm) spacing.

These coils shall be tested against leakage by air pressure of 450 psig (3100 kPa) under water, cleaned & dehydrated at the factory. Coil shall conform to ARI-410.

### CONDENSER FAN(S) & MOTOR(S)

Unit shall be furnished with a direct driven propeller type, discharging air upward, these fans to be equipped with Aluminum blades, permanently lubricated bearings, and inherent corrosion resistance shaft. Each condenser fan shall be balanced statically and dynamically at the factory. Complete fan assembly is provided with suitable acrylic coated fan guard.

Motor shall be Totally Enclosed Air Over (TEAO), 6 poles, with class F insulation, minimum IP55 protection and factory wired to unit control panel.

### EVAPORATOR COIL

Evaporator coil shall be constructed of seamless copper tubes 3/8" OD mechanically bonded to aluminum (copper) cross-wave fins with maximum 12fpi (2.1mm) spacing.

Coil consists of headers of seamless copper tubing, thermostatic expansion valve(s) & multi-circuited distributor(s).

These coils shall be tested against leakage by air pressure of 250 psig (1720 kPa) under water, cleaned & dehydrated at the factory. Coil shall conform to ARI-410.

### EVAPORATOR FAN(S) & MOTOR

Fans of evaporators shall be forward curved, double inlet double width (DIDW), centrifugal type, statically & dynamically balanced, mounted on a single heavy duty shaft with permanently lubricated bearings & driven by V belt with an adjustable variable pitch motor pulley.

Motor shall be Totally Enclosed Fan Cooled (TEFC), 4 poles, class-F insulated, minimum IP55 protection & wired to unit control panel.

### REFRIGERANT PIPING

Refrigerant circuit piping shall be fabricated from ACR grade copper including shut-off valve, filter drier & thermostatic expansion valve.

Suction line shall be insulated with 1/2" (12mm) wall thickness enclosed cell pipe insulation with maximum k factor 0.28 Btu.in/ft<sup>2</sup> h°F.

### CASING

Casing shall be made of hot dip galvanized, phosphatized steel sheets which are then electrostatically polyester powder coated to provide an extremely tough, scratch resistance & excellent anti-corrosive protection. Casing shall pass 1000 hours in 5% salt spray testing at 95°F (35°C) & 95% relative humidity as per ASTM B117.

Evaporator section shall be sealed with vinyl gaskets & completely insulated faced with black glass tissue (BGT) heavy density, fire retardant, permanent odorless fiberglass insulation of minimum 1" (25 mm) thickness & 32 kg/m<sup>3</sup> density having maximum k factor 0.23 Btu.in/ft<sup>2</sup> h°F. (0.033 W / m °K).

Unit casing shall be provided with access panels for easy service & maintenance of all unit parts.

### FILTER SECTION

Packaged air conditioner shall be provided with easily accessible cleanable media, minimum 1" (25 mm) thick filter having average arrestance efficiency of 75% as per ASHRAE standard 52 - 76 or equivalent.

### CONTROL PANEL

The panel shall be factory wired in accordance with NEC 430 & 440, and conforms to IP54 requirements.

Control Panel shall contain individual electrical components' contactors, overload relays, transformer, anti-recycling time delay relay, control circuit disconnect switch, power & control circuit terminal blocks and High / low pressure switch.

(Please refer to page 4 for detailed information of Control Panel).